

January 27, 2016

VIA ELECTRONIC FILING

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street SW Washington, DC 20554

Re: Special Access for Price Cap Local Exchange Carriers; WC Docket No. 05-25,

RM-10593

Dear Ms. Dortch:

Pursuant to the procedures outlined in the Data Collection Protective Order¹ in the above-referenced proceedings, Sprint Corporation ("Sprint") hereby submits a redacted version of the attached comments for electronic filing. Confidential and highly confidential treatment of the redacted portions of the attached document is required to protect information derived from data submitted in response to the FCC's Data Collection Order.²

In accordance with the Data Collection Protective Order, Sprint will file a hardcopy of the attached document with the Secretary's Office, and deliver two additional hardcopies to Christopher S. Koves, Pricing Policy Division, Wireline Competition Bureau, without redaction.

Please contact me if you have any questions or require any additional information.

Sincerely,

Jennifer P. Bagg

Counsel to Sprint Corporation

Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Order and Data Collection Protective Order, 29 FCC Rcd. 11,657 (Wireline Comp. Bur. 2014).

Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd. 16,318 (2012).

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
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Special Access for Price Cap Local)	WC Docket No. 05-25
Exchange Carriers)	
)	
AT&T Corporation Petition for)	RM-10593
Rulemaking to Reform Regulation of)	
Incumbent Local Exchange Carrier Rates)	
for Interstate Special Access Services)	

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EXECUTIVE SUMMARY

Dedicated broadband services are the foundation of our nation's information economy. These services, known at the Federal Communications Commission ("FCC" or "Commission") as "special access services," differ from consumer-grade broadband because they offer guaranteed connectivity at a guaranteed bandwidth. As a consequence, they are the single most important telecommunications service for connecting the buildings of small, medium and large businesses, schools, and local governments to competitive providers like Sprint for access to the Internet and other IP-enabled services. Furthermore, these dedicated broadband services are the connections that make the mobile Internet possible, by linking both the macro and micro base stations (*i.e.*, cell phone towers) that mobile carriers must deploy to keep up with surging consumer demand for data.

Because of the critical importance of dedicated broadband to our economy, the marketplace for special access services continues to be the linchpin of telecommunications competition in the Internet age. Wholesale special access services form the core of the networks that competitive telecommunications providers use to offer businesses and consumers an alternative to the broadband services sold by the incumbent local exchange carriers ("incumbent LECs") that dominate the marketplace. Of central importance to Sprint, these wholesale services are the essential links that connect wireless towers and access points to the Internet. Special access, roaming, and spectrum are the three critical inputs necessary to ensure that the wireless markets of the future are competitive.

Specifically, wireless carriers are faced with a rapid increase in demand for mobile data.

Consumers expect access to increasing amounts of content wherever they are and on whatever device they are using. These expectations continue to rise. This means wireless carriers will

need to deploy a whole new generation of networks or "5G" networks that will provide unprecedented speed and capacity. While 5G will encompass numerous new technologies, there is general consensus that 5G will unquestionably demand a vast increase in the number of base stations. It has been estimated that carriers will need to deploy tens of thousands new transmitters to create the speed and capacity consumers are demanding from mobile networks. Each of these new transmitters will, in turn, require some form of dedicated broadband connection to the rest of the network.

The Commission has recognized the central importance of these dedicated broadband services to the nation's economy and that an unaddressed lack of competition for these connections would have dire consequences for the country. It therefore initiated this proceeding to "review[] [its] special access rules to ensure that they reflect the state of competition today and promote competition, investment, and access to dedicated communications services businesses across the country rely on every day to deliver their products and services to American consumers." To gather the data it needed to answer this question, it undertook the most comprehensive data collection in the agency's history.

Today the public gains access to the results of this data collection, although in redacted form. After ten years of delay tactics, political pressure, and obfuscation, AT&T, Verizon, and other incumbent LECs can no longer deny what broadband purchasers have always known:

There is inadequate competition to discipline incumbent LEC prices, and the FCC must act to repair the ongoing damage.

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Special Access for Price Cap Local Exchange Carriers - AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd. 16,318, ¶ 1 (2012).

The numbers are staggering. The incumbent LEC is the only provider of special access service of any capacity, from the lower-capacity connections that serve ATMs to the very highest capacity connections that serve whole factories, in a huge majority of locations—specifically in *** BEGIN HIGHLY CONFIDENTIAL ***

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CONFIDENTIAL *** of such locations. This means that in the vast bulk of buildings and cell towers where any business, school, government, or wireless transmitter needs dedicated broadband services of any type, the incumbent LEC is the only actual or potential provider.

Most of our nation's buildings and cell towers have no competitive choice for the essential

It gets worse. Even where the LEC is not the *only* provider of special access service, the market is still uncompetitive. In the small minority of locations where the incumbent faces any competition at all, most locations have only two actual or potential providers—specifically ***

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*** of such locations. This means that even where there is a modicum of competition,

purchasers almost always have "a choice of only two providers. That is what economists call a duopoly."²

infrastructure in the 21st Century economy.

As the FCC has previously correctly concluded, a single competitor is not sufficient to protect consumers from anticompetitive behavior, and the special access marketplace is no different. Competition economics theory recognizes that the presence of more than two competitors at a location is generally needed to represent effective competition, and the FCC has said that four providers are necessary. The Commission's new data demonstrate that there are

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Tom Wheeler, Chairman, FCC, The Facts and Future of Broadband Competition, Prepared Remarks at the 1776 Headquarters, Washington, D.C. (Sept. 4, 2014).

four or more providers of any special access service, from the lowest to the highest capacity products, only in a tiny percentage of locations nationwide—specifically in *** BEGIN

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*** END HIGHLY CONFIDENTIAL *** of locations.

Examining the Commission's data using other competition-analysis tools yields consistent results. The Herfindahl-Hirschman Index ("HHI"), a commonly accepted measure of market concentration, confirms the findings described above. Based on the new data submitted in the record, the HHI exceeds the "Highly Concentrated" level in an astoundingly high number of census blocks—specifically *** BEGIN HIGHLY CONFIDENTIAL ***

END HIGHLY CONFIDENTIAL *** of all census blocks in which an incumbent LEC provides special access service of any capacity level, from the lowest capacity to the highest.

When one divides the overall marketplace for special access services into separate product markets, the data paint a similarly bleak picture. Not all special access services are considered to be substitutes by consumers, because some consumers need lower-capacity connections for credit-card swipe services or ATMs, while others need higher-capacity connections for cell towers or large businesses. In individual, capacity-based product markets, the data show incredibly high incumbent LEC market shares. The vast majority of special access lines are in the 0-10 Mbps or 10-50 Mbps product markets, specifically *** BEGIN HIGHLY CONFIDENTIAL ***

*** END HIGHLY CONFIDENTIAL ***. The data show that the incumbent LECs have near complete dominance of these product markets, with a market share of *** BEGIN HIGHLY CONFIDENTIAL ***.

Broken down further, in the 0-10 Mbps product market, the incumbent LECs' revenue share is an astounding *** BEGIN HIGHLY CONFIDENTIAL ***

HIGHLY CONFIDENTIAL ***. In the 10-50 Mbps product market, the incumbent LECs' share is still an incredible *** BEGIN HIGHLY CONFIDENTIAL ***

END HIGHLY CONFIDENTIAL ***. Even including the highest capacity product markets, where one might expect to see greater competition, incumbent LECs control more than ***

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The Commission's data collection has accomplished more than a demonstration of overwhelming dominance by the incumbent LECs. The collection has also resulted in every responding incumbent revealing that it employs "loyalty commitments" and other anti-competitive terms and conditions. Through these terms and conditions built into special access plans, it is now clear that incumbent LECs harness their market dominance to force purchasers into a "your money or your life" choice—either agree to competition-killing loyalty commitments (and the overage charges, shortfall payments, and inflated early termination payments that reinforce these commitments) or face business-killing rack rates or restrictions in service. While the decisions of each purchaser to accept a loyalty plan may be a rational response to anticompetitive behavior, the cost to the marketplace as a whole is high, as the barriers that new entrants face in attempting to win away customers that are locked into loyalty plans become considerably higher.

The data collection could have even shown more, had the incumbent LECs fully complied with the FCC's data requests. But they did not. The incumbent LECs have effectively hidden their level of dominance in particular geographic areas by failing to properly report the

location of a large percent of their special access lines. Consequently, the levels of dominance demonstrated herein are almost certainly understated in certain geographic or product markets as a result of the incumbent LECs failure to fulfill their responsibility to provide the Commission with the data it requested.

Nonetheless, the FCC's extraordinary data collection has accomplished its goal. The Commission now has a solid foundation on which to act to repair the fundamentally broken special access marketplace. Now is the time to resolve this long pending proceeding. The FCC should take immediate interim action by: (1) returning services subject to Phase II pricing flexibility to the price cap regime and taking steps necessary to include Ethernet services under the price cap regime, and (2) declaring anticompetitive loyalty commitments to be unenforceable because they are unjust and unreasonable, thereby providing purchasers with a "fresh look" so that they can avail themselves of competition in the few places where it exists today. The Commission must also implement long-term repairs to the special access regulatory system by: (1) establishing pricing benchmarks to adjust prices in areas where competition does not constrain prices; (2) revising the X-factor that accounts for the productivity gains that would lead to lower prices in a competitive market; and/or (3) using existing models that measure costs of service to set appropriate caps on prices.

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COMMENTS OF SPRINT CORPORATION

Sprint Corporation ("Sprint") hereby submits these comments in response to the Federal Communication Commission's ("FCC" or "Commission") Report and Order and Further Notice of Proposed Rulemaking issued on December 18, 2012, in the above-captioned proceedings.

The Report and Order called for the mandatory collection of data from certain entities subject to the Commission's jurisdiction under the Communications Act of 1934, as amended (the "Act"), that provide or purchase special access services in price cap areas. Section IV.B of the Further Notice of Proposed Rulemaking accompanying the Report and Order sought comment on possible changes to its rules for the special access services provided by incumbent local exchange carriers ("incumbent LECs" or "ILECs") following review of the collected data.

FCC Rcd. 16,318, ¶ 1 (2012) ("2012 R&O and FNPRM").

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Special Access for Price Cap Local Exchange Carriers - AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Report and Order and Further Notice of Proposed Rulemaking, 27

I. INTRODUCTION AND SUMMARY

Guided by the Commission's traditional market power analysis, Sprint performed a comprehensive review of the data collected by the FCC. The results of Sprint's analysis corroborate the experience reported by every participant in the special access marketplace, aside from the incumbent LECs themselves. The numbers are staggering. At *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL *** of the locations where special access services are sold (i.e., buildings and cell towers), the incumbent LEC is the sole provider. And even in the few locations where an alternative facilities-based provider exists, market concentration analysis confirms the absence of effective competition. Indeed, only a tiny *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY **CONFIDENTIAL** *** of locations benefit from enough facilities-based competition to adequately constrain incumbent LEC rates, terms, and conditions. The data also confirm the absence of potential competition, and show that incumbent LEC loyalty commitments enforced by outrageous penalties further limit the ability of competition to develop. These conclusions are undisturbed by the incumbent LECs' erroneous claim that a conveniently timed spate of cabledriven "competition" has magically rendered the Commission's data unusable—suddenly upending nearly a century of uninterrupted incumbent dominance of the special access marketplace.

In the sections that follow, Sprint explains why the Commission's proven traditional market power analysis is the best method for determining whether competition can constrain anticompetitive rates, terms, and conditions in the special access marketplace. Applying the first steps of this analysis, Sprint identifies the relevant product markets for special access services, concluding that (1) channel termination and channel mileage services are separate products, (2) the capacity of special access services, rather than the technology used to provide them,

distinguishes one special access product from another from the perspective of the typical special access consumer, and (3) best efforts broadband is not a substitute for the dedicated services that special access customers require. Sprint also urges the Commission to define relevant geographic markets with sufficient granularity in order to avoid contaminating its analysis with crude overstatements of available competition. As a part of this discussion, Sprint cautions the Commission to reject the fallacy at the heart of the incumbent LECs' claim that the special access marketplace is competitive: the misconception that the presence of *one* alternative supplier of *any* special access product *anywhere* proves the existence of effective competition for all products *everywhere*.

After identifying the elements of a sound analytical foundation for the Commission's analysis, Sprint explains its findings, which can be summarized succinctly. Incumbent LECs are the only providers of special access services at the vast majority of locations, retain overwhelming shares of the highly concentrated special access marketplace, and are unconstrained by both the limited competition they face today and the prospect that potential competition might emerge in the future. Sprint demonstrates that these findings are consistent with substantial additional evidence, including comprehensive studies performed by research bodies and other government agencies.

In subsequent sections, Sprint unpacks the data collection responses that address the incumbent LECs' use of anticompetitive terms and conditions. These responses confirm that the incumbents' terms and conditions function as loyalty commitments that lock up the existing and incremental demand for special access services, deter the entry of competitive providers, and limit the pace of technological progress in the special access marketplace, without producing any

meaningful countervailing pro-competitive benefits. On this basis, Sprint concludes that the terms and conditions are unjust and unreasonable.

Sprint then explains the impact of the incumbent LECs' anticompetitive prices, terms, and conditions on the U.S. telecommunications system and the many sectors of our economy that rely on dedicated broadband access. The incumbent LECs' stranglehold on the special access marketplace is threatening technological progress, depressing broadband access and competition, and diminishing improvements in quality of service—all at a cost of billions of dollars to U.S. workers and lost output to our economy as a whole.

Sprint concludes by proposing several potential remedies that could mitigate these harms both now and in the long-run. To provide immediate relief, Sprint proposes that the Commission correct the unjust and unreasonable harms caused by a previous Commission's flawed predictive triggers—incorrectly identified areas of competition in the special access marketplace—and return services subject to Phase II pricing flexibility to the price cap regime. The Commission must also take immediate steps to bring Ethernet services under the price cap regime.

Further, Sprint urges the Commission to determine that anticompetitive loyalty commitments are unenforceable and allow purchasers of special access services a "fresh look" so that they can avail themselves of the limited competitive alternatives that exist today, as well as the potential alternatives that may emerge as regulatory reforms unlock the demand currently committed to the incumbent LEC. While this step will only help purchasers in a small number of locations, it is a useful first step and may serve as a foundation for generating more competition by freeing up demand from incumbent LEC lock-up schemes.

While these interim measures are positive preliminary measures for addressing the broken special access market, the Commission must act swiftly to implement a long-term regime

to ensure that lasting competition is injected into the market. To assist in this process, Sprint urges the FCC to develop pricing benchmarks to adjust prices in areas where competition does not constrain pricing. Alternatively, the Commission could consider revising the X-factor governing increases in special access pricing based on changes in growth rates over time. The Commission also could use existing models that measure the costs of service to set appropriate caps on prices. Properly implemented, each of these approaches would allow the Commission to limit the incumbent LECs' ability to charge unjust and unreasonable prices without threatening investment and innovation in special access services.

The comprehensive record that the FCC has amassed in this proceeding paints a bleak picture of the future of broadband in the United States absent immediate Commission action. Sprint therefore urges the Commission to act quickly to fix the broken marketplace that forms the core of our country's high-speed networks and the technological innovation they drive.

II. A TRADITIONAL MARKET POWER ANALYSIS SHOULD FORM THE FOUNDATION OF THE COMMISSION'S REVIEW OF THE SPECIAL ACCESS MARKETPLACE

The Commission has set out to ensure that the special access rules "reflect the state of competition today and promote competition, investment, and access to dedicated communications services [that] businesses across the country rely on every day to deliver their products and services to American consumers." The FCC's well-understood, traditional approach to conducting a market power analysis is the best way for the Commission to fulfill this goal because it will allow the Commission to identify areas in which competition is sufficient to constrain carriers from "imposing unjust, unreasonable, or unjustly or unreasonably

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² *Id*.

discriminatory rates, terms, and conditions, or from acting in an anticompetitive manner." This traditional framework involves:

[A] thorough analysis, which traditionally begins with a delineation of the relevant product and geographic markets, and then considers market characteristics, including market shares, the potential for the exercise of market power, and whether potential entry would be timely, likely, and sufficient to counteract the exercise of market power.⁴

There is widespread support in the record⁵ for the Commission to again employ this analysis to determine whether the incumbent LECs continue to dominate the special access marketplace. The Commission adopted this proven market power framework years ago and has

Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona, Metropolitan Statistical Area, Memorandum Opinion and Order, 25 FCC Rcd. 8622, ¶ 37 (2010), aff'd, Qwest Corp. v. FCC, 689 F.3d 1214 (10th Cir. 2012) ("Qwest Order" or "Qwest").

Id. ¶ 28; see also, e.g., Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, 12 FCC Rcd. 15,756, ¶¶ 28, 40-41 (1997) (explaining that the Commission determines whether a carrier is dominant by delineating the relevant product and geographic markets, identifying current or potential suppliers in that market, and determining whether the carrier in question possesses individual market power in that market); Motion of AT&T Corp. to Be Reclassified as a Non-Dominant Carrier, Order, 11 FCC Rcd. 3271, ¶¶ 38-73, 139 (1995) ("AT&T Non-Dominance Order"); AT&T Inc. and BellSouth Corporation Application for Transfer of Control, Memorandum Opinion and Order, 22 FCC Rcd. 5662, ¶ 24 (2007) ("AT&T-BellSouth MO&O").

⁵ See, e.g., Comments of the New Jersey Division of Rate Counsel at 9, WC Docket No. 05-25 (filed Feb. 11, 2013) (supporting the use of the structural market analysis the FCC employed in *Qwest*) ("Rate Counsel Comments"); Comments of BT Americas Inc., Cbeyond Communications, LLC, EarthLink, Inc., Integra Telecom, Inc., Level 3 Communications, LLC, and tw telecom inc. at 64, WC Docket No. 05-25 (filed Feb. 11, 2013) ("The established market power framework is a reliable and efficient means of identifying the relevant special access markets in which incumbent LECs currently have the ability to set and maintain supra-competitive prices.") ("Joint CLEC Comments"); Comments of the Ad Hoc Telecommunications Users Committee at 8-9, WC Docket No. 05-25 (filed Feb. 11, 2013) ("Ad Hoc Comments"); Comments of XO Communications, LLC at 3-5, WC Docket No. 05-25 (filed Feb. 11, 2013) (The Commission's market power analysis "is widely accepted as the analytical framework that will most accurately determine whether and the extent to which competition exists.") ("XO Comments").

applied it in numerous contexts, including in the *Qwest* decision.⁶ As the Commission has recognized, this analytical framework is "well-designed to protect consumers, promote competition, and stimulate innovation" and will help to ensure that the Commission's approach is "not only data-driven, economically sound, and predictable, but also reflects a forward-looking approach to competition and the best understanding of ways to appropriately tailor regulatory relief when it is justified."⁷

Other U.S. agencies and regulators in other countries have a long history of using the traditional framework to perform competition analyses. For example, the Commission's market power analysis closely tracks the framework described in the Horizontal Merger Guidelines used by the Department of Justice and Federal Trade Commission. Moreover, this approach has been upheld on judicial review. Notably, the Tenth Circuit Court of Appeals rejected Qwest's claim that "the Commission's assessment of competitive conditions in the Phoenix market was unreasonable," thereby sustaining the very same analytical approach Sprint suggests for this

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See, e.g., Wireline Competition Bureau Seeks Comment on Applying the Qwest Phoenix Forbearance Order Analytic Framework in Similar Proceedings, Public Notice, 25 FCC Rcd. 8013, ¶ 1 (2010) (explaining that the Commission frequently has used a traditional market power analysis to determine whether there is sufficient competition to render certain regulatory protections unnecessary) ("Qwest Public Notice"); Qwest Order ¶ 37 n.122 (disagreeing with "AT&T and Verizon that a market power approach ... applies only to mergers").

⁷ *Owest Order* ¶ 3.

See, e.g., id. ¶¶ 1, 37 (noting that this approach is "comparable to the analysis used by the DOJ, FTC, and telecom regulators in other countries, including those in the European Community, to determine the extent of competition in a market").

⁹ See, e.g., Qwest Corp. v. FCC, 689 F.3d 1214, 1221 (10th Cir. 2012) ("As the April 2010 public notice had hinted, the Commission 'return[ed] to a traditional market power framework,' an analytical approach employed in earlier proceedings and embodied in the FTC-DOJ Horizontal Merger Guidelines.").

proceeding. ¹⁰ The court concluded that the Commission had "offered an extensive discussion of its reasons for . . . adopting the market-power approach." ¹¹ The Commission's best course of action is to follow the approach endorsed by the court and widely accepted as appropriate in this context.

Indeed, the Commission is now well positioned to use the data it has collected in this proceeding to perform a market power analysis in a way that is consistent with, and superior to, the analysis it performed in *Qwest*. As a group of joint CLECs outlined in the record, and as shown in our findings below, "[t]he 2013 data can be used in each step of this analysis," and should enable the Commission to perform a competitive analysis that is more comprehensive than the one it performed in *Qwest*. Specifically, when the Commission analyzed Qwest's market power in the Phoenix MSA, it lacked "data in the record by which to calculate market shares for any relevant wholesale loop product market," data "to identify the location of competitive local transport facilities or to calculate market shares for dedicated local transport," or information that would allow the Commission to evaluate "elasticity of demand, or whether any wholesale [or retail enterprise] competitors have comparable size, resources, or cost structure to Qwest." The Commission's data collection in this proceeding provides the information needed to perform a similar, and in fact more robust, analysis.

¹⁰ *Id.* at 1227.

¹¹ *Id.* at 1230.

Opposition of Birch Communications, Inc., BT Americas Inc., Integra Telecom, Inc., and Level 3 Telecommunications, LLC at 12, WC Docket No. 05-25 (filed Nov. 10, 2014) ("Joint Opposition").

Owest Order ¶ 70.

¹⁴ *Id.* ¶ 76.

¹⁵ *Id.* nn.206, 230, & 260.

Parties in the record have already correctly recognized the value that the data collection will lend to the Commission's analysis:

[I]nformation regarding the number of "Connections" owned by and "Dedicated Services" sold by the different service providers will assist the Commission in determining market shares. And information regarding the types of services competitors provide via their own physical connections to end users and competitors' build/buy guidelines will enable the Commission to assess whether potential entry would be timely, likely, and sufficient to counteract exercise of market power in the future. ¹⁶

In addition, the Commission collected detailed information about the location of competitive special access facilities, which will enable a more comprehensive analysis of actual and potential competition, ¹⁷ as well as information that can be used to calculate market share. ¹⁸ In fact, this information will permit the Commission to conduct the most comprehensive market power analysis in its history.

III. THE COMMISSION'S MARKET POWER ANALYSIS MUST DEFINE THE RELEVANT PRODUCT AND GEOGRAPHIC MARKETS ACCURATELY

Under the *Qwest* analytical approach, an analysis of market power begins with the definition of the relevant product and geographic markets. Accurate market definitions ensure that FCC rules properly distinguish between competition that has the potential to discipline incumbent behavior and competition related to a different product or in a different location such that it cannot discipline incumbent behavior. Product and geographic markets that are too large would suggest more competitive discipline than what currently exists in the marketplace.

¹⁶ Joint Opposition at 12-13.

See Special Access for Price Cap Local Exchange Carriers - AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access, Order on Reconsideration, 29 FCC Rcd. 10,899, App. A § II.A.3-6, (2014).

¹⁸ *Id.* App. A §§ II.A.15-16, II.B.8-10.

A. Relevant Product Markets

It is well settled that different special access services occupy different relevant product markets and therefore may require different regulatory treatment. ¹⁹ To determine whether two services belong in the same product market, the "fundamental question" is whether the prospect of a buyer substituting one service with another constrains the price of the first service. ²⁰ Factors the Commission should consider when making this determination include differences in the technical characteristics of the services and the extent to which customers actually switch between the services. ²¹

1. Services

Consistent with its prior decisions, the Commission should treat channel termination and channel mileage special access services as separate product markets. Channel terminations and local transport "constitute separate relevant product markets," because these two services perform different functions.²² Channel termination services connect a single customer's

Declaration of Stanley M. Besen and Bridger M. Mitchell, ¶¶ 11-16, appended as Attachment 1 hereto ("Besen/Mitchell Decl.").

Qwest Order ¶ 56 (explaining that, in determining whether mobile wireless access is in the same market as wireline access, "[t]he fundamental question in a traditional product market definition exercise is whether mobile wireless access service constrains the price of wireline access service. These two services should be in the same relevant market only if the prospect of buyer substitution to mobile wireless access constrains the price of wireline access.").

Unbundled Access to Network Elements - Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Order on Remand, 20 FCC Rcd. 2533, ¶ 193 (rel. 2005) ("TRRO Order"); Reply Comments of Sprint Nextel Corporation at 16-17, WC Docket No. 05-25 (filed May 31, 2013) ("Sprint Reply Comments").

²² SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control, Memorandum Opinion and Order, 20 FCC Rcd. 18,290, ¶ 27 (2005); see also, e.g., AT&T-BellSouth MO&O ¶ 30 (2007) (noting that "services provided over different segments of special access (e.g., channel terminations and local transport) constitute separate relevant product markets"); Reply Comments of the National Association of State Utility Consumer Advocates and the New Jersey Division of Rate Counsel at 12, WC Docket No. 05-25 (filed

premises to an end office,²³ while channel mileage services involve "carrying traffic from one point of traffic concentration to another."²⁴ As a result, channel termination and channel mileage services are not substitutes for one another.²⁵

Separately, the FCC should treat the TDM-based channel terminations and Ethernet special access services as one product market if they offer similar capacity levels. While incumbent LECs historically have separated the channel termination and channel mileage segments of a TDM-based special access circuit into distinct rate elements, newer technologies—such as Ethernet—may be offered at a single recurring charge that includes the price of both segments of a circuit that connect a customer premise with another termination point. Regardless of the service's rate structure, a dedicated Ethernet link is the last-mile connection to a customer premise and therefore is part of the same relevant product market as a

Mar. 12, 2013) ("Channel termination and channel mileage services are distinct products[.]") ("NASUCA/Rate Counsel March 2013 Reply").

This functionality is the same regardless of whether the customer's location is a building or a cell tower. Accordingly, special access services that are used to backhaul wireless traffic should not be analyzed as part of a separate product market. *See, e.g.*, Comments of BT Americas Inc. at 23, WC Docket No. 05-25 (filed Jan. 19, 2010) ("Special access services used to connect cell towers to mobile operators' switching centers (*e.g.*, DS-1s) sit in the same product market as other equivalent special access services and should not be separated into a distinct product market. This was Ofcom's conclusion in the UK."); Comments of Sprint Nextel Corporation at 15-16, WC Docket No. 05-25 (filed Jan. 19, 2010) (suggesting that special access services used for backhaul are identical to other special access services, except that the geographic markets in which backhaul services are supplied may be less competitive than the geographic markets for other special access services, because many cell towers are located in remote geographic locations) ("Sprint 2010 Comments").

Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Report and Order, 27 FCC Rcd. 10,557, n.201 (2012) ("2012 Suspension Order").

²⁵ Besen/Mitchell Decl. ¶ 11.

TDM-based channel termination for purposes of assessing competitive conditions.²⁶ The fact that Ethernet connections use a different protocol to transmit the same voice and data traffic carried over legacy facilities is irrelevant to the proper product market classification of Ethernet.²⁷ Moreover, the Wireline Competition Bureau implicitly recognized that Ethernet services are substitutes for TDM-based channel terminations when it questioned whether special access customers should be permitted to count Ethernet purchases toward their percentage commitments for TDM-based channel terminations.²⁸

Finally, the Commission should exclude "best efforts" services from the definition of *any* special access product market. As many parties correctly have asserted, these services are not an

There is no reason to use different analytical tools to evaluate the marketplace for TDM- and non-TDM-based services. *See* Comments of COMPTEL at 7, WC Docket No. 05-25 (filed Apr. 16, 2013) ("COMPTEL Comments"). As previously noted by COMPTEL, "[m]arket power concerns do not disappear merely because a market is evolving, particularly . . . here where [a] BOC can leverage its market power in 'legacy' services into the 'emerging' services." (internal citations omitted) *Id.* at 8. Accordingly, the standard for determining market power need not change based on the technology in question, especially because market structure will remain largely the same.

See, e.g., Sprint 2010 Comments n.8 ("The technology used to provide the connection (e.g., TDM or Ethernet) is not relevant to the analysis.").

See Investigation of Certain Price Cap Local Exchange Carrier Business Data Services Tariff Pricing Plans, Order Initiating Investigation and Designating Issues for Investigation, 30 FCC Rcd. 11,417, ¶¶ 56, 58, 70-71 (2015) ("Designation Order"); see also, e.g., Reply Declaration of Dennis W. Carlton and Allan L. Shampine at 7 (Mar. 12, 2013) (attached to Reply Comments of AT&T, WC Docket No. 05-25 (filed Mar. 12, 2013)) ("[O]ther technologies such as Ethernet are being used as alternatives to special access."); Letter from Maggie McCready, Verizon Vice President Federal Regulatory Affairs, to Marlene H. Dortch, Secretary, FCC, at 1, WC Docket No. 05-25 (filed Feb. 5, 2015) ("Customers have increasingly turned to business Ethernet services, for example, and for a significant number of customers, Ethernet has become a substitute for DS1 and DS3 services.").

effective substitute for special access services and do not constrain the prices for such services.²⁹ For example, the Ad Hoc Telecommunications Users Committee aptly noted:

[B]est efforts business broadband Internet access services are, well, best efforts—the antithesis of special access and the modern day equivalent of traditional switched voice service which may or may not be available (or too slow) when the network is busy. [Moreover,] special access services are services for which the customer, rather than the carrier, specifies the end points. . . . By definition, best efforts business broadband Internet access services take customers to the Internet and only to the Internet, via the carrier's choice of Internet access point; they cannot provide a dedicated connection between two premises designated by the customer, such as a bank ATM machine, a merchant's point-of-sale terminal, a secure data storage facility, or a cellular service tower.³⁰

Sprint, as a wholesale purchaser of Ethernet to serve business customers, does not purchase best efforts Ethernet service. Among other concerns, best efforts services do not provide the quality of service necessary to meet business customer needs, such as the need for access to real-time voice or video. To the contrary, special access service is a dedicated, guaranteed bandwidth service, and therefore, the appropriate Ethernet substitute is dedicated Ethernet, not best efforts Ethernet. In short, the service functionality differences between special access offerings and best

NASUCA/Rate Counsel March 2013 Reply at 13 ("The FCC should reject comments seeking to incorporate 'best efforts' broadband services in special access market analysis."); Joint CLEC Comments at 7, 49-57 (detailing the record evidence demonstrating that retail business customers that purchase special access services generally do not view best efforts broadband Internet access services as viable substitutes); Letter from Thomas Jones and Nirali Patel, Counsel, Cbeyond, Inc., Earthlink, Inc. and Integra Telecom, Inc., to Marlene H. Dortch, Secretary, FCC, at 2, WC Docket No. 05-25 (filed Nov. 21, 2012) (citing "record evidence demonstrating that 'best efforts' broadband services are not a substitute for the dedicated broadband services at issue in the special access rulemaking proceeding . . .").

Ad Hoc Comments at 12; *see also* Besen/Mitchell Decl. ¶ 16 ("services provided on a 'best-efforts' basis are not regarded by most purchasers as substitutes for special access dedicated circuits at guaranteed service levels").

efforts services are so significant that most customers simply do not consider the latter to be a realistic substitute for the former.³¹

2. Capacity

As explained above, the *technology* used to provide a particular special access connection is not relevant to the Commission's determination of whether that connection is part of a product market, unless that technology affects the characteristics of that connection in a way that changes customers' substitutability decisions. But the *capacity* of special access services creates important distinctions that warrant separate treatment because customers do not necessarily view low-capacity connections as substitutes for high-capacity connections. Therefore, in defining special access product markets, the Commission should continue to take into account differences in the capacity of connections.³²

See, e.g., Declaration of Paul Schieber ¶¶ 4-5, attached as Attachment A to Comments of Sprint Nextel Corporation, WC Docket No. 05-25 (filed Feb. 11, 2013) ("Sprint Comments") (outlining the bandwidth limitations and other technical and performance shortcomings that prevent best efforts services provided over hybrid fiber coaxial ("HFC") networks from acting as viable substitutes for special access services); Letter from Joshua M. Bobeck, Counsel, PAETEC Holding Corp., and Thomas Cohen, Counsel, XO Communications, LLC, to Marlene Dortch, Secretary, FCC, at 24-25, WC Docket No. 05-25 (filed May 28, 2010) ("The available evidence in the record indicates that most customers of special access service [(e.g., business customers)] do not view HFC-based services as substitutes for special access services because HFC networks are not capable of providing the features demanded by special access customers[,] such as guaranteed bandwidth and service level agreements."); Reply Comments of Cbeyond, Integra, One Communications and tw telecom at 11, WC Docket Nos. 06-172 & 07-97 (filed Oct. 21, 2009) ("[I]t is difficult if not impossible to deliver the guaranteed service levels demanded by business customers over shared networks, including HFC-based networks.").

See, e.g., Qwest Order ¶ 49 ("The Commission . . . has found that, in general, circuits of differing capacities . . . are likely to constitute separate relevant product markets. Consequently, we find it appropriate to distinguish product markets further based on capacity."); AT&T-BellSouth MO&O ¶ 30 n.94 (2007) ("[W]e find that, in general, different capacity circuits are likely to constitute separate relevant product markets[.]"); NASUCA/Rate Counsel March 2013 Reply at 12 ("[S]ervices with different capacities are distinct products."); Reply Comments of tw telecom inc. at 9, WC Docket No. 05-25 (filed

For example, DS1 and DS3 TDM-based channel termination and channel mileage services—and the Ethernet equivalents of these services—effectively are in separate product markets. This is the case because, at normally prevailing market prices, a small but significant increase in the DS1 price or Ethernet equivalent would not cause purchasers to shift to a DS3 or Ethernet equivalent service.³³ Moreover, competitive alternatives for the different capacities are likely to differ because, as the Commission has recognized, "[a] DS3 loop has 28 times the capacity of a DS1 loop, and thus offers a substantially greater revenue opportunity" than a DS1 loop.³⁴ This fact "forecloses an approach that would treat the different capacity facilities as though they were the same."³⁵

With more flexible scalability due to a flatter cost structure, differentiation for higher-capacity services has become more nuanced as carriers employ newer packet-based technologies such as Ethernet products for dedicated access links, but Ethernet and DSn services remain in the same product market when they offer similar capacities. Specifically, carriers often use Ethernet interchangeably with lower-capacity TDM-based services such as DS1s and DS3s. Thus, Ethernet and TDM services with comparable capacities should be considered part of the same

Feb. 24, 2010) (noting that "the FCC must account for capacity and associated price differences in defining product markets" and that "a capacity-based approach is consistent with FCC precedent") ("tw telecom Reply Comments").

Besen/Mitchell Decl. ¶¶ 11-12.

³⁴ TRRO Order ¶ 170.

Id.; see also, e.g., Besen/Mitchell Decl. ¶¶ 12, 14; Peter Bluhm and Dr. Robert Loube, Competitive Issues in Special Access Markets, NAT'L REGULATORY RESEARCH INST., Revised Ed., at iii, v (first issued Jan. 21, 2009), attached to Letter from James Bradford Ramsay, National Association of Regulatory Utility Commissioners, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 (filed June 12, 2012) (finding that "the level of competition varies by location, circuit capacity, and service component" and that the "FCC should . . . recognize that circuit capacity is an important variable in competition") ("NRRI Report").

product market. Further, where it is available, a special access customer currently may also choose to purchase a single Ethernet connection in lieu of purchasing multiple DS3 circuits. Therefore, the Ethernet equivalents of multiple DS3 circuits belong in the same product market as multiple DS3 circuits. The Commission implicitly recognized this substitutability when it mandated, as part of the IP transition, that incumbent LECs that seek to discontinue TDM-based special access services must then provide competitive carriers with a substitute (presumably IP-based) service "on reasonably comparable rates, terms, and conditions." 36

At some point, when differences in capacity—and possibly in price—are large enough between two offerings, the FCC should consider them to be in different product markets because consumers would not regard them to be substitutes. This is true whether the two offerings are both DSn, both Ethernet, or whether they use different technologies—in other words, it is the capacity of the connection, rather than the technology used to deliver the capacity, that should drive categorization.

Of critical importance to this proceeding, however, is if the incumbent LEC is the only facility-based provider of either TDM-based or Ethernet service at a given capacity level at a customer's location, it does not matter whether these services occupy different product markets for purposes of the FCC's analysis. In this case, the incumbent LEC's control of any special access service product at the customer's location would result in a finding of market power, regardless of how the product market is defined.

Technology Transitions; Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers et al., Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 30 FCC Rcd. 9372, ¶¶ 6, 101 (2015) ("Technology Transitions Release").

B. Relevant Geographic Markets

The FCC's analysis of competitive conditions in special access marketplaces should use very granular geographic market definitions.³⁷ Both the Commission and Dr. Mitchell agree that the Commission's previous trigger, which granted incumbent LECs pricing flexibility relief on an MSA-wide basis, ignored the wide variability of competitive conditions across a large geographic area.³⁸ As a result, the incumbents were able to exploit their pricing flexibility to charge supra-competitive prices to wholesale and retail customers while also impeding new entry.

Using MSAs to analyze market power "can be highly misleading because these large areas often contain smaller geographic areas across which competitive conditions are widely disparate." For example, the Commission concluded in the context of reviewing its unbundling requirements that "a geographic area as large as a MSA is so large and varied that such a grouping is prone to significantly overbroad impairment determinations . . . [and] would substantially over-predict the presence of actual deployment, as well as the potential ability to deploy." In the same decision, the Commission observed that "MSAs are comprised of

Besen/Mitchell Decl. ¶¶ 19-21.

Declaration of Bridger M. Mitchell ¶ 33, appended as Attachment A to Sprint 2010 Comments, WC Docket No. 05-25 (filed Jan. 19, 2010) (noting that "the competitive alternatives available to customers in an MSA will rarely be uniform across the MSA") ("Mitchell Decl.").

³⁹ Besen/Mitchell Decl. ¶ 17.

TRRO Order ¶ 82; see also id. ¶ 155 ("[A]n MSA-wide approach relying on objective, readily available data . . . would require an inappropriate level of abstraction, lumping together areas in which the prospects for competitive entry are widely disparate[.]"); id. ¶ 164 ("[A] single MSA can encompass urban, suburban, and rural areas, each of which presents different challenges to competitive LECs seeking to self-deploy high-capacity loop facilities or to obtain such facilities from an alternative wholesale provider. An impairment

communities that share a locus of commerce, but not necessarily common economic characteristics as they relate to telecommunications facilities deployment."⁴¹ More recently, the Commission found that "MSAs have generally failed to reflect the scope of competitive entry," noting that "demand varies significantly within any MSA, with highly concentrated demand in areas far smaller than the MSA."⁴²

To analyze the special access marketplace, the Commission must identify the area within which a special access customer would purchase a service from an alternative supplier (assuming one were available) if its current supplier increased the price of the relevant product. In most cases, this area is limited to the customer's location, because "it would be prohibitively expensive for an enterprise customer to move its office location in order to avoid . . . increases in the price of special access services, and because there are significant entry barriers to putting competitive last-mile facilities into place."

This granular geographic market analysis applies both to channel terminations and channel mileage. The customer's location is the appropriate geographic market for channel terminations because the "availability of competitive facilities varies from building to

determination that applies to a geographic zone of this size is therefore likely to either overestimate or under-estimate impairment.").

⁴¹ *Id.* ¶ 82.

⁴² 2012 Suspension Order ¶¶ 35-36; see also id. ¶¶ 46-48 (outlining additional evidence that "an MSA is probably a much larger area than a competitor would typically choose to enter").

⁴³ Owest Order n.142.

Wavecom Solutions Corporation, Transferor, and Hawaiian Telcom, Inc., Transferee, Applications for Consent to Transfer Control, Memorandum Opinion and Order and Declaratory Ruling, 27 FCC Rcd. 16,081, ¶ 12 (2012).

building"⁴⁵ and customers typically will not relocate their businesses simply to avoid a price increase.⁴⁶ Even in the instant proceeding, the Commission observed that "[c]ompetition in the provision of special access appears to occur at a very granular level—perhaps as low as the building/tower."⁴⁷

Dr. Mitchell similarly has stated that:

The Merger Guidelines' test suggests that the relevant special access geographic market for channel termination service is the building in which the customer is located. . . . A larger area—multiple buildings or the area served by a wire center—would be excessively large, because the customer's cost of switching to service available at a different building would not prevent the hypothetical monopoly supplier of the building from sustaining a price increase in that building.⁴⁸

The GAO likewise found that "the extent of competitive entry in a market [should be analyzed] at the level of individual buildings."⁴⁹

The relevant geographic market for channel mileage services must also be defined narrowly. As a practical matter, the only substitute for a customer with a channel mileage link

Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as Amended, for Forbearance from Certain Dominant Carrier Regulation of Its Interstate Access Service, and for Forbearance from Title II Regulation of Its Broadband Services, in the Anchorage, Alaska, Incumbent Local Exchange Carrier Study Area, Memorandum Opinion and Order, 22 FCC Rcd. 16,304, ¶ 35 (2007).

See, e.g., Qwest Order ¶ 64 ("Consistent with Commission precedent, we reaffirm that each customer location constitutes a separate relevant geographic market, given that a customer is unlikely to move in response to a small, but significant and non[-]transitory increase in the price of the service.").

⁴⁷ 2012 R&O and FNPRM ¶ 22.

⁴⁸ Mitchell Decl. ¶ 35; *see also* Besen/Mitchell Decl. ¶ 19.

⁴⁹ UNITED STATES GOV'T ACCOUNTABILITY OFFICE, FCC Needs to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services, GAO-07-80, at 19, 22 (Nov. 2006), http://www.gao.gov/products/GAO-07-80 ("GAO Report").

that connects two central offices is a circuit provided by a competing supplier connecting the same points. Thus, the relevant geographic market for such services is route-by-route. ⁵⁰

Drs. Besen and Mitchell note, however, that even if the Commission chooses not to, or is unable to, analyze the data it has gathered on a location-by-location or route-by-route basis because of the nature of the data it has collected, it can still make well-founded conclusions about the state of competition. If an analysis of data across broader geographic areas than the customer's location still finds that incumbent LEC market power is extensive, that would be a clear indication of incumbent LEC dominance. This is the case because an analysis using larger geographic areas would over-estimate competition, meaning that a finding of market power using larger geographic markets would be even stronger proof of market dominance than using customer locations. The converse is not necessarily true, however. If the FCC conducts its analysis using geographic areas larger than the customer premises and finds an absence of market power, this finding could be due to the fact that it has overestimated competition by including competitors operating in areas too far from a customer to represent legitimate, actual, or potential competition.

IV. THE DATA COLLECTED BY THE COMMISSION CONFIRM THAT THE INCUMBENT LECS REMAIN DOMINANT IN THE PROVISION OF SPECIAL ACCESS SERVICES

After defining the relevant product and geographic markets, the next step in the traditional market assessment is to conduct a "thorough analysis . . . [that] considers market

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See, e.g., Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, et al., Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16,978, ¶ 495 n.1536 (2003) ("[W]e define the relevant geographic market for transport as route-by-route[.]"); Sprint Reply Comments at 18; Comments of TelePacific at 9, WC Docket No. 05-25 (filed Feb. 11, 2013) ("The Commission should analyze competition in the transport market on a route-by-route basis.").

characteristics, including market shares."⁵¹ Drs. Besen and Mitchell have performed that analysis in the attached report.⁵² As the report demonstrates, the incumbent LECs, by any measure, continue to have market power in the provision of special access services. Notably, these findings are entirely consistent with the FCC's preliminary finding that "results from the Commission's data collection show that incumbent LECs remain the sole facilities-based provider of TDM-based special access services to a majority of business locations that demand or are likely to demand business data services nationwide."⁵³ As outlined below, the facts are undeniable and unquestionably probative of incumbent LEC market power: "[I]n the vast majority of the special access product and geographic markets, the incumbent LECs do not face effective competition."⁵⁴

A. The Data Show that Incumbent LECs Are the Only Providers of Special Access Services in the Overwhelming Majority of Locations

Drs. Besen and Mitchell commenced their analysis by examining the first requirement for assessing competitiveness: identifying the number of carriers serving customers at locations within a defined geographic area. While this is only the beginning of the analysis, as the Commission has noted, analyzing information regarding where end user customers are connected

⁵¹ 2012 Suspension Order \P 88; see also, e.g., Qwest Order $\P\P$ 38, 42 n.144.

Drs. Besen and Mitchell carried out their analyses in conjunction with the Brattle Group and SMG consulting, who have filed a separate declaration that provides additional detail about the data sources that they have employed and the calculations that they have performed. Declaration of William P. Zarakas and Susan M. Gately, appended as Attachment 2 hereto ("Zarakas/Gately Decl.").

⁵³ Designation Order ¶ 4.

⁵⁴ Besen/Mitchell Decl. ¶ 22.

"is critical in determining how and where competition for special access services exists or is likely to develop." ⁵⁵

In particular, Drs. Besen and Mitchell used the collected data to identify the number of facilities-based suppliers providing special access service at a particular location—*i.e.*, the incumbent and competitive LECs that actually serve special access customers at buildings or cell towers using their own dedicated facilities.⁵⁶ The Commission previously has highlighted this important distinction. For example, the Commission specifically noted Qwest's failure to demonstrate actual or potential competition from competitors "that rely on their own last-mile connections to serve customers."⁵⁷

Based on their review, Drs. Besen and Mitchell found that, at the vast majority of locations, the incumbent LEC is the only facilities-based provider of special access services—meaning that not one facilities-based competitive LEC has even a single customer at that location. Specifically, they found that the incumbent LEC is the only provider of special access service in *** BEGIN HIGHLY CONFIDENTIAL ***

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locations, there are only two suppliers—the incumbent LEC and a competing carrier.⁶⁰ In other

Special Access for Price Cap Local Exchange Carriers, Report and Order, 28 FCC Rcd. 13,189, ¶ 20 (2013).

⁵⁶ Besen/Mitchell Decl. ¶ 24.

⁵⁷ *Qwest Order* \P 87.

⁵⁸ Besen/Mitchell Decl. ¶¶ 25 (Table 1), 26.

⁵⁹ *Id*.

⁶⁰ *Id*.

words, virtually all locations—*** BEGIN HIGHLY CONFIDENTIAL ***

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HIGHLY CONFIDENTIAL *** of locations and four or more suppliers at *** BEGIN HIGHLY CONFIDENTIAL *** of locations. 62

Even at the broader census block level, *** BEGIN HIGHLY CONFIDENTIAL ***

*** END HIGHLY CONFIDENTIAL *** of census blocks contain three

suppliers and *** BEGIN HIGHLY CONFIDENTIAL ***

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HIGHLY CONFIDENTIAL *** of blocks contain four or more suppliers. ** Notably, this

minute percentage still unquestionably *overstates* competition, because Drs. Besen and Mitchell conservatively treated all competitive LECs that offer service at a single location in the census block as providing service to the entire census block for purposes of their analysis. As they note:

[T]his approach is likely to overstate potential competition at many purchaser locations. The provision of service to some purchasers in a census block is not necessarily an indication that a competitor can serve all buildings in that census block, or even that the "potential competitor" provides the same special access service as the ILEC.⁶⁴

Drs. Besen and Mitchell also reviewed information compiled by the Commission from the facility maps submitted by the competitive LECs. As they note, however, use of this data

⁶¹ *Id*.

⁶² *Id*.

⁶³ Besen/Mitchell Decl. ¶¶ 27 (Table 2), 28.

⁶⁴ *Id.* ¶ 29.

"would be inappropriate for purposes of assessing potential competition." Notably, a competitive LEC with transport facilities that simply traverse a census block would be shown as present in that census block, even though it is not offering service to a single location within that block. Moreover, as Drs. Besen and Mitchell note, a competitive LEC's network facilities often may be located at such a distance from the customer that the competitive LEC "would be unable to recoup the costs of extending its network facilities from future sales."

Based on their analysis, Drs. Besen and Mitchell conclude that "the vast majority of special access product and geographic markets are not effectively competitive." This conclusion is based on their view that several suppliers—"likely [] four—and certainly more than two"—that actually compete with one another in a limited geographic area (*i.e.*, the incumbent LEC and at least two or more competitors) "are needed to give a competitive outcome in the special access markets under consideration in this proceeding." The difference between using a "three competitor" standard versus a "four competitor" standard would not lead to materially different results. ⁶⁹ In either case, the necessary criterion would be met at only an extremely small number of locations across the country—*** **BEGIN HIGHLY**

⁶⁵ *Id.* ¶ 30.

⁶⁶ *Id*.

⁶⁷ *Id.* ¶ 9; see also ¶ 31.

Besen/Mitchell Decl. ¶ 47. As noted in the Declaration, this finding is based on economic literature, as well as prior findings of both the Commission and the Department of Justice. *Id.* ¶¶ 31, 45-46. As Drs. Besen and Mitchell recognize, "the exact number may be different in different industries, based on their different cost and demand characteristics." *Id.* ¶ 47; *see also* ¶ 47, n.37.

 $^{^{69}}$ *Id.* ¶ 31 ("Our conclusion, however, would be little changed if instead we had assumed that only three competitors were sufficient to achieve competitive outcomes.").

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B. The Data Show that Incumbent LECs Retain Overwhelming Shares of the Special Access Marketplace

As noted, even the presence of a competitor at nearby locations overestimates the extent of competition. This is because, as Drs. Besen and Mitchell point out, the mere presence of a competing special access provider in proximity to a customer location does not mean that the firm has succeeded in attracting significant market share away from the incumbent provider. Thus, to present a more accurate view of the competitive landscape for special access services, they deepened their analysis by measuring both the volume of the carriers' sales as calculated by bandwidth and the revenues they obtained. Their conclusions again corroborate what nearly every purchaser of special access has known for years about the commercial reality of this marketplace: in the vast majority of locations, market forces are unable to prevent incumbent LECs from assessing unjust and unreasonable rates and terms.

Bandwidth-Based Concentration. Drs. Besen and Mitchell began by calculating Herfindahl-Hirschman Index ("HHI") values based on bandwidth-based market shares. These figures confirm overwhelming incumbent LEC dominance, demonstrating that the HHI exceeds the level characterized by the antitrust agencies as "Highly Concentrated" in an enormous ***

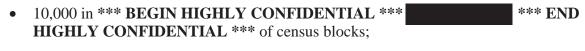
BEGIN HIGHLY CONFIDENTIAL *** ** END HIGHLY

CONFIDENTIAL *** of census blocks in which an incumbent LEC provides special access

⁷⁰ *Id.* ¶¶ 25 (Table 1), 26.

U.S. DEP'T OF JUSTICE AND FED. TRADE COMM'N, *Horizontal Merger Guidelines*, §§ 5.1-5.3 (Aug. 19, 2010), http://www.justice.gov/atr/horizontal-merger-guidelines-08192010 ("*Horizontal Merger Guidelines*").

services, "in most by a very substantial amount." Specifically, the HHI in census blocks in which an incumbent LEC provides special access service is:



- Between 7,500 and 10,000 in *** **BEGIN HIGHLY CONFIDENTIAL** ***

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- Between 5,000 and 7,500 in *** **BEGIN HIGHLY CONFIDENTIAL** ***

 *** **END HIGHLY CONFIDENTIAL** *** of census blocks; and
- Between 2,500 and 5,000 in *** **BEGIN HIGHLY CONFIDENTIAL** ***

 *** **END HIGHLY CONFIDENTIAL** *** of census blocks. 73

Amazingly, even in census blocks where the incumbent LEC is not the sole supplier of special access services, the HHI again exceeds the threshold for being deemed "Highly Concentrated" in

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Drs. Besen and Mitchell also used the bandwidth-based information to perform a bandwidth share analysis and again found that the incumbent LECs remain dominant in the overwhelming majority of census blocks in which they provide service. Specifically, incumbent LECs are the sole providers of special access services in *** BEGIN HIGHLY

Besen/Mitchell Decl. ¶¶ 36 (Table 3), 37.

⁷³ *Id*.

Id. ¶¶ 36 (Table 3), 38. Specifically, Drs. Besen and Mitchell found that, in all census blocks where special access service is provided by either a competitive LEC or an incumbent LEC, the HHI is 10,000 in *** BEGIN HIGHLY CONFIDENTIAL ***

END HIGHLY CONFIDENTIAL *** of census blocks; between 7,500 and 10,000 in ***

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CONFIDENTIAL *** **END HIGHLY CONFIDENTIAL** *** of all census blocks.⁷⁵

Revenue-Based Shares. Drs. Besen and Mitchell also calculated revenue-based market shares for each of the major incumbent LECs, both for all special access services sold and for special access offerings of differing capacities. Their findings once again demonstrate incumbent LEC dominance—"the weighted-average ILEC share of revenues of all special access services combined is *** BEGIN HIGHLY CONFIDENTIAL ***

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Moreover, because these figures were calculated at the incumbent LEC footprint level, 77 these shares are "likely to overestimate competition in many smaller geographic areas."

The vast majority of special access lines are in the 0-10 Mbps or 10-50 Mbps product markets, specifically *** BEGIN HIGHLY CONFIDENTIAL *** END

HIGHLY CONFIDENTIAL ***.⁷⁹ The data show that the incumbent LECs have near complete dominance of these product markets, with a market share of *** BEGIN HIGHLY CONFIDENTIAL ***.⁸⁰ When

⁷⁵ Besen/Mitchell Decl. ¶ 28 n.45.

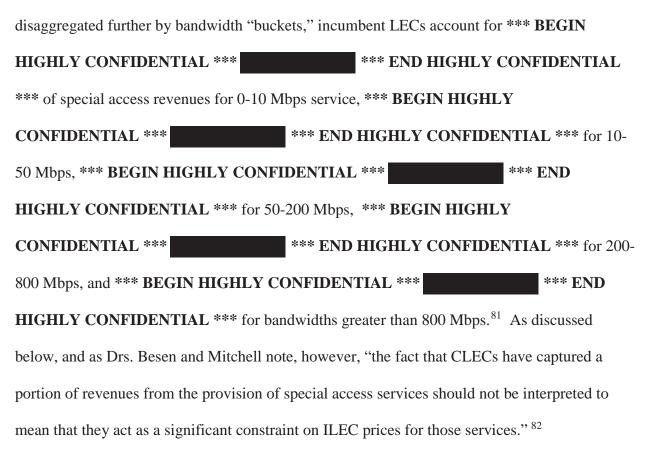
⁷⁶ *Id.* ¶¶ 39 (Table 4), 40.

This analysis was performed at the footprint level because the incumbent LECs failed to provide required information regarding a substantial number of customer locations. *Id.* ¶ 34 n.52. While some of these locations presumably are interoffice transport with no identifiable location, the incumbent LECs also allege in their "explanatory notes" that they have no way of knowing the locations of many of the customers that they serve. As a result, Drs. Besen and Mitchell were "unable to calculate revenue-based market shares revenues at a more granular geographic level at this time." *Id.*

⁷⁸ *Id.* ¶ 42.

⁷⁹ See Zarakas/Gately Decl. ¶ 17.

⁸⁰ *Id*.



The conclusions to be drawn from the analyses outlined above are clear:

- (1) At the vast majority of locations where special access is sold, the incumbent LEC is the only facilities-based provider with any customers. 83 Even in the few locations (or even census blocks) where there is any competition, there generally is only a duopoly that plainly does not ensure the results that a competitive marketplace would produce.
- (2) An HHI and revenue analysis confirms incumbent LEC dominance: *** BEGIN HIGHLY CONFIDENTIAL *** END HIGHLY CONFIDENTIAL *** of census blocks in which special access services are sold qualify as "Highly Concentrated," and the incumbent LECs hold an extraordinarily high

Besen/Mitchell Decl. ¶¶ 40 (Table 5), 41.

⁸² See infra at section V.C.; see also Besen/Mitchell Decl. ¶ 41.

⁸³ Besen/Mitchell Decl. ¶ 42.

⁸⁴ *Id.* ¶¶ 36 (Table 3), 38.

revenue-based share of *** BEGIN HIGHLY CONFIDENTIAL ***

*** END HIGHLY CONFIDENTIAL *** of the special access marketplace. 85

(3) Even in the few census blocks where incumbent LECs face some competition, they "still continue to capture a very large share of all special access service volumes in the great majority census blocks, which is a further indication of the limited competition that they often face." 86

Indeed, whether one examines the number of competitive suppliers in the relevant geographic and product markets, or the volume or revenue-based market shares that competing suppliers have captured, the overriding conclusions are inescapable: the special access marketplace is highly concentrated, and the incumbent LECs are the dominant providers of special access services throughout the country.

V. CONTRARY TO CLAIMS BY THE INCUMBENT LECS, NEITHER ACTUAL NOR POTENTIAL COMPETITION CONSTRAINS THEIR DOMINANCE

As a further step in its traditional competition analysis, the Commission considers the "potential for the exercise of market power, and whether potential entry would be timely, likely, and sufficient to counteract the exercise of market power." The incumbent LECs likely will continue to insist that the presence of *any* current or potential competing provider of *any* product in *any* location is sufficient to discipline prices and terms. But this is certainly not the case. Effective competition requires the presence of an adequate number of rival firms who are capable of providing the products that consumers want. As Drs. Besen and Mitchell show, the incumbent LEC is the only provider with facilities at *** BEGIN HIGHLY CONFIDENTIAL *** of locations, and there is only the incumbent LEC or one other provider present in the *** BEGIN HIGHLY

⁸⁵ *Id.* ¶¶ 39 (Table 4), 40.

⁸⁶ *Id.* ¶ 42.

⁸⁷ 2012 Suspension Order \P 88; see also, e.g., Qwest Order $\P\P$ 38, 42 & n.144.

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the considerably larger census block areas. 88 Even in the latter areas, the presence of a competing provider in one part of a census block does not mean that the carrier is able or willing to compete against the incumbent LEC in all parts of the block. Furthermore, the number of locations where there are three or more providers of special access services is an exceptionally small *** BEGIN HIGHLY CONFIDENTIAL ***

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CONFIDENTIAL *** and is too rare of an occurrence to correct a fundamentally broken market. 89 Put simply, the data demonstrate that effective competition simply does not exist in

A. Incumbent LEC Claims Regarding the Importance of Limited Market Entry by Competitive Suppliers Are Vastly Overstated

As outlined above, the data demonstrate that there most often are *no* competing suppliers at a location to which buyers could shift their purchases in response to a price increase by the incumbent LEC. ⁹⁰ Even when a competitive supplier is present, however, Dr. Besen has established that a single competitor generally is insufficient to discipline a firm's conduct. ⁹¹ A

the special access marketplace.

⁸⁸ Besen/Mitchell Decl. ¶¶ 25 (Table 1), 26, 27 (Table 2), 28.

⁸⁹ *Id.* ¶ 25 (Table 1), 26.

See, e.g., Special Access Rates for Price Cap Local Exchange Carriers - AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Order and Notice of Proposed Rulemaking, 20 FCC Rcd. 1994, ¶ 97 (2005) ("Supply responsiveness measures the ability of carriers, other than the price cap LEC, to supply enough capacity to respond to demand migrating from the price cap LEC's network in the event of a LEC price increase for its special access services.") ("2005 Order & NPRM").

See generally Declaration of Dr. Stanley M. Besen, attached to Letter from Andrew L. Lipman, Counsel, TDS Metrocom et al., and Thomas Jones, Counsel, Cbeyond et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 08-24 (filed Apr. 23, 2009). This Declaration states that "a wide variety of theoretical models recognize, and even predict, that

duopoly simply does not ensure that marketplace forces will lead the firms involved to compete vigorously. As the Commission aptly noted in *Qwest*, the assumption "that a duopoly always constitutes effective competition and is necessarily sufficient to ensure just, reasonable, and nondiscriminatory rates" is "inappropriate[]."⁹²

Considering a duopoly to constitute effective competition would be particularly misguided in the special access marketplace. Even where competitive facilities and substitute services are available, the ability of a special access customer to switch to another provider frequently is constrained by other considerations. ⁹³ For example, incumbent LECs use "exclusionary purchase arrangements" that are "likely to substantially diminish a customer's willingness to switch service providers in response to a price increase by the incumbent LEC." As explained in detail in section VII *infra*, these "lock-up" and other anticompetitive terms often effectively prevent a customer from taking advantage of new competing service offerings. ⁹⁵

duopoly more typically leads to higher prices than would prevail in a market with a larger number of firms and that the entry of additional firms would result in lower prices." *Id.* at 2.

⁹² *Qwest Order* \P 29.

Mitchell Decl. ¶ 66 (A customer may be "constrained by the terms and conditions of existing contracts, or by the transaction costs of migrating circuits to a service if the alternative is available at only a few end offices."); *see also, e.g.*, Reply Comments of the New Jersey Division of Rate Counsel at 16-17, WC Docket No. 05-25 (filed Feb. 24, 2010) (Demand "elasticities are low – purchasers' ability to switch to alternative suppliers depends on the presence of such suppliers and the quality of the substitute, as well as the cost of switching to [an] alternative supplier. Contracts that lock customers into certain volumes or time periods raise the cost of changing providers.") ("Rate Counsel Reply Comments").

⁹⁴ Joint CLEC Comments at 67.

See, e.g., Petition of Ad Hoc Telecommunications Users Committee, BT Americas, Cbeyond, Computer & Communications Industry Association, EarthLink, MegaPath, Sprint Nextel, and tw telecom to Reverse Forbearance from Dominant Carrier Regulation of Incumbent LECs' Non-TDM-Based Special Access Services at 52, WC Docket No. 05-25 (filed Nov. 2, 2012) ("Even at the few locations where competitive facilities are available, . . . incumbent LECs often impose terms and conditions in their special access tariffs and commercial agreements that limit a customer's ability to switch from non-TDM-based or TDM-based

Understanding that, at most locations, the incumbent LECs face no facilities-based competitors, and that most of the areas where there is any competition are duopolies, is important. This is because the incumbent LEC's central argument is that a lone knight—the cable industry—has single-handedly converted their monopoly into a vigorously competitive marketplace by creating a duopoly in the small percentage of census blocks where they have special access customers.

In a set of recent *ex partes*, notable both for their vigorous hand waving and exceptionally contrived arguments, several incumbent LECs made the extraordinary claim that special access services became competitive overnight (or at least since 2013, the time period for which the data were collected). Conveniently, the incumbent LECs argue that the competition arrived at the very moment when the Commission and parties began to analyze the collected data.

Unsurprisingly, these claims do not withstand scrutiny. For example, USTelecom alleged that the special access marketplace has become competitive after learning of Comcast's plans to offer customized communications networks for large enterprise customers. ⁹⁶ Comcast's latest enterprise offering, however, relies heavily on partnerships with other providers that have

special access services provided by the incumbent LEC to non-TDM-based special access services provided by a competitor.") ("Petition to Reverse Forbearance"); Mitchell Decl. ¶ 21 ("Requirements that a customer commit to purchasing nearly all of its special access service from the incumbent LEC, reduce purchases from incumbent LEC competitors, and pay very substantial penalties for deviating from committed quantities tend to lock customers into the incumbent LEC supplier."); Reply Declaration of Joseph Farrell on Behalf of CompTel, appended as Attachment to Reply Comments of CompTel, Global Crossing North America, Inc. and NuVox Communications ¶ 3, WC Docket No. 05-25 & RM-10593 (filed July 29, 2005) ("[C]ompetitive entry generally has been restricted to the highest capacity services provided in dense metropolitan areas.") ("Farrell Decl."); Rate Counsel Reply Comments at 16-17 ("Contracts that lock customers into certain volumes or time periods raise the cost of changing providers.").

Letter from Jonathan Banks and Diane Griffin Holland, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 (filed Sept. 18, 2015).

existing facilities, rather than on the construction of new facilities in markets that currently are dominated by an incumbent LEC. Even if Comcast's announcement could be read to signal a rapid rise in facilities-based retail competition, it is important to note that it provides absolutely no indication that Comcast plans to expand its provision of *wholesale* special access.

Likewise, Verizon would have the Commission believe that Comcast's provision of special access services is sufficient to drive down incumbent LEC prices and preclude anticompetitive terms. ⁹⁷ The facts and figures that Verizon cites, however, are drawn from a Comcast Business brochure that, when viewed in its entirety, confirms that Comcast's dedicated broadband coverage is dwarfed by that of the incumbent LECs. ⁹⁸ Verizon also points to carefully selected advertisements by other cable and competitive providers as proof that its dominance of special access has ended. But even if all of these advertisements represented real competitors—even added together—all of these companies' special access services would yield only a small fraction of Verizon's market share, and certainly not enough to discipline incumbent LEC behavior.

The incumbent LECs' arguments boil down to the assertion that the FCC need not act to reform the broken special access market simply because marketing materials suggest there may be *one* competitive entrant for *one* special access product in *some* geographic areas. This

See Profile of Enterprise Broadband Providers at 1, appended as App. to Letter from Curtis L. Groves, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 (filed Sept. 24, 2015).

Id. (Comcast Business networks span 141,000 miles of fiber). In the first quarter of 2015, AT&T reported that its fiber network alone spanned 1,011,227 miles (most of which are located in the United States). See AT&T, 1Q2015: AT&T by the Numbers (2015), https://www.att.com/Common/about_us/pdf/att_btn.pdf.

assertion unquestionably is incorrect, and the FCC should ignore the incumbent LECs' attempt to obscure the facts. 99

B. There is Inadequate Potential Competition to Serve as an Adequate Check on the Incumbent LECs' Dominance

The data fully account for potential competition and demonstrate that potential competition alone is insufficient to check the incumbent LECs' anticompetitive behavior in the special access marketplace. As noted above, the incumbent LEC is the only special access service provider at the vast majority of customer locations. Dr. Mitchell has recognized that, "[in a building or other location where there are no competitive facilities, the customer typically has little opportunity to switch to an alternative supplier, and so the demand elasticity faced by the incumbent LEC is lower than in buildings where a competitor supplies service." In the larger

Given the inaccuracy of previous predictions of future competition, the Commission should be extremely reluctant to base a finding of non-dominance on the promise of potential competition. *See Qwest Order* ¶ 33-36; *2012 Suspension Order* ¶ 1 (explaining that the existing pricing flexibility rules "are not working as predicted"); *see also id.* ¶¶ 3, 5.

Mitchell Decl. ¶ 67. To measure demand responsiveness, "economists traditionally . . . identify[] other special access options, relevant to that particular market, that are close substitutes, and determin[e] whether consumers are impeded from switching to these substitutes." 2005 Order & NPRM ¶ 94; see also, e.g., Revisions to Price Cap Rules for AT&T, Report and Order, 10 FCC Rcd. 2962, ¶ 20 (1995). High demand elasticity indicates that "the particular service market is subject to competition." Comsat Corporation Petition Pursuant to Section 10(c) of the Communications Act of 1934, as amended, for Forbearance from Dominant Carrier Regulation and for Reclassification as a Non-Dominant Carrier, Order and Notice of Proposed Rulemaking, 13 FCC Rcd. 14,083, ¶ 71 (1998). (Demand elasticity "refer[s] to the willingness and ability of [an incumbent LEC's] customers to switch to another telecommunications service provider or otherwise change the amount of services they purchase from [the incumbent LEC] in response to a change in the price or quality" of the incumbent LEC's service.).

census block, there still is no competing provider in a substantial number of blocks, meaning that the potential for competitive entry is remote.

Even when a limited number of competitors are present, potential competition to supply customers at that location *may* exist when there are suppliers with facilities that offer service at nearby buildings. The number of these nearby suppliers—and their market share in the same census block—therefore may give an indication of potential competition for service at the location. Of course, even this measure significantly overstates the potential for competitive entry, because the "provision of service to some purchasers in a census block is not necessarily an indication that a competitor can serve all buildings in that census block, or even that the 'potential competitor' provides the same special access service as the ILEC." For example, even when a competitive LEC offers a particular service to a limited number of locations in a census block, its fiber may be located too far away from the majority of buildings in the block to be deemed a potential competitor at all locations within the census block. The Commission itself noted this issue when it suspended the application of the existing special access triggers,

¹⁰¹ Besen/Mitchell Decl. ¶ 29.

See, e.g., tw telecom Reply Comments at 11-12 ("[T]he entry barriers to facilities-construction are particularly high. As a result, and because of real-world capital constraints, competitors can build fiber laterals to a small number of additional buildings each year."); Comments of PAETEC Holdings Inc.; TDS MetroCom, LLC; U.S. TelePacific Corp.; MPower Communications Corp.; Masergy Communications, Inc.; and New Edge Network, Inc. at 43, WC Docket No. 05-25 (filed Jan. 19, 2010) ("For many of the same reasons why new entry is unlikely, existing competitors are also unlikely to be able to add new capacity quickly to serve locations where they have not already deployed facilities, even in response to anti-competitive practices or pricing from the incumbent provider."); Declaration of Bridger M. Mitchell and John R. Woodbury, CRA International ¶ 78 (dated July 26, 2005), appended as Attachment 1 to the Reply Comments of Nextel Communications, Inc., WC Docket No. 05-25 (filed July 29, 2005) ("[M]ere proximity to CLEC fiber fails to account for the frequently substantial costs of connecting data loops to the existing CLEC facilities.").

finding that "collocations . . . are not a reliable indicator of the presence of actual or potential competition in the provision of channel terminations." 103

For potential competition to be effective, providers must be able to enter quickly and without large, up-front investments. ¹⁰⁴ The special access marketplace satisfies neither requirement. As the Commission has observed, "most of the cost of providing a service access line is in the support structure, *i.e.*, trenches, manholes, poles and conduits, and rights of way, and access the building. ¹⁰⁵ These expenses are in addition to the cost of the cable itself. ¹⁰⁶ The tremendous sunk costs involved in entry are particularly daunting in the special access marketplace because the only way for a firm to compete against the incumbent LEC often is "to enter the market at a large scale and in many geographic areas." ¹⁰⁷ A customer who requires service at multiple locations otherwise might find it uneconomic to switch a small percentage of

¹⁰³ 2012 Suspension Order ¶ 77.

Comments of the NoChokePoints Coalition at 12, WC Docket No. 05-25 (filed Jan. 19, 2010) ("Competitive providers can discipline ILEC competitive behavior, however, only if they can quickly and inexpensively extend capacity to provide competition to ILEC-serviced buildings and cell sites.") ("NoChokePoints Comments"); *see also, e.g., id.* at 13 ("For potential competition to be capable of restraining the conduct of an incumbent with a large market share[,] the market cannot be one in which a competitor must make large sunk cost investments.").

 $^{^{105}}$ 2005 Order & NPRM ¶ 26; see also, e.g., Sprint Reply Comments at 36-37.

See, e.g., Rate Counsel Reply Comments at 18 ("Expanding networks to reach new locations and to provide channel terminations requires a competitor to incur significant sunk costs (installing new cable or microwave facilities); rights of way, construction costs, administrative costs; [and] expanding supply of interoffice transport also requires costs (installation of collocation facilities; installing new cable).").

Mitchell Decl. ¶ 21; *see also* Comments of XO Communications, LLC at 15, WC Docket No. 05-25 (filed Feb. 11, 2013) ("As a practical matter, XO cannot transition its circuits at the expiration of a price cap LEC agreement to other providers. Of paramount importance, no competitor could support the circuits as a whole, given that only the price cap LEC has the facilities in place with the reach to meet XO's needs in many locations.").

its lines to a provider that serves only a few sites. In addition, the incumbent LECs are both competitors with, and suppliers to, new providers and thus, have an incentive to "raise entrants' costs by charging high prices for interconnection, network elements and services." ¹⁰⁸

A potential competitor also would have to surmount the considerable obstacles presented by the incumbent LECs' competition-suppressing terms and conditions. To do so, a potential provider's only option would be "to offer uneconomically low prices to overcome the substantial penalties buyers would face if they were to shift even a small percentage of their purchases to alternative vendors." As NASUCA aptly notes, "[b]y essentially freezing demand through the imposition of hefty penalties for failure to meet volume or term discounts, ILECs prevent the very competition they contend is imminent or 'potential." 110

Finally, a potential entrant would have to compete against the incumbent LECs' entrenched advantages. As the Commission has noted, "markets where a price cap LEC owns or has access to important assets or resources that are not accessible to the potential entrant bestows an absolute advantage on the incumbent." The record in this proceeding contains ample evidence of the first-mover advantages that incumbent LECs possess in the provision of special access services. For example, the incumbent LECs already have deployed network facilities

Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rules, Memorandum Opinion and Order, 14 FCC Rcd. 14,712, ¶ 107 (1999).

¹⁰⁹ Sprint Comments at 24.

¹¹⁰ NASUCA/Rate Counsel March 2013 Reply at 17.

¹¹¹ 2005 Order & NPRM ¶ 107.

capable of providing special access service to virtually every commercial building in their footprints, permitting the incumbent LECs to realize scale economies. 112

The incumbent LECs also benefit from other economies of scale and scope. As parties have noted in the record:

Their larger base of customers enables them to lower their fiber deployment costs by deploying new fiber facilities to a large number of locations in a single deployment and to obtain volume discounts on equipment needed to upgrade service arrangements. In addition, AT&T and Verizon are two of the largest long distance, broadband and mobile wireless service providers in the country. To the extent that these businesses share joint and common costs with special access, as is the case for example with interoffice transport facilities, the resulting scope economies again give the incumbents['] lower average costs than their competitors. ¹¹³

Collectively, these barriers serve to refute any claim that the prospect of potential entry into the special access marketplace effectively would constrain the incumbent LECs' unjust and unreasonable behavior.

C. The Data Do Not Show that the Highly Concentrated Marketplace for Even Very High-Capacity Services Is Effectively Competitive

Drs. Besen and Mitchell note that the share numbers for the incumbent LECs for very high-capacity services are lower than their extraordinarily high shares of lower-capacity

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Farrell Decl. ¶ 3 ("Special access services are characterized by economies of scale and sunk costs, as well as substantial incumbent first-mover advantages such as rights-of-way and building access."); Comments of Fibertech Networks, LLC at 19, WT Docket No. 11-65 (filed May 31, 2011) ("As a result of their ubiquitous networks – a legacy of their previously state-sanctioned monopolies, AT&T and other ILECs gain market power from ubiquity that is unavailable to competitors.").

¹¹³ Joint CLEC Comments at 69-70.

offerings.¹¹⁴ However, those shares must be viewed in light of other relevant factors that substantially dilute the competitive significance of those data points.¹¹⁵

As an initial matter, the share numbers for high-speed services do not change the fact, as the FCC-collected data show, that the incumbent LECs are the *only* facilities-based suppliers with special access customers at any capacity level in the vast majority of locations throughout the country. Moreover, when an incumbent LEC is not the sole high-capacity service provider in the census block or location, there generally is no more than *one* competitor available to serve a potential customer. As explained, ¹¹⁷ a duopoly simply does not represent effective competition.

It also is important to recognize the relative size of the marketplace for higher-capacity connections services today. Those circuits make up a small fraction of the total special access demand: offerings with capacities that exceed 200 Mbps represent *** BEGIN HIGHLY CONFIDENTIAL *** of all circuits. 118

Further, neither the relative size of this marketplace nor the incumbent LECs' shares should be particularly surprising. As parties previously have stated in the record, incumbent LECs have been "reluctant" to offer higher-capacity service aggressively, because doing so would "cannibalize" their legacy, lower-speed offerings. 119 When the incumbent LECs

¹¹⁴ Besen/Mitchell Decl. ¶¶ 40 (Table 5), 41.

¹¹⁵ See, e.g., id. ¶¶ 41, 48.

¹¹⁶ *Id.* ¶¶ 25 (Table 1), 26.

¹¹⁷ See supra at V.A.

 $^{^{118}}$ Zarakas/Gately Decl. \P 18.

¹¹⁹ Comments of tw telecom inc. at 23, WC Docket No. 05-25 (filed Jan. 19, 2010).

ultimately decide to accelerate their deployment of the highest-capacity services, they will be able to exploit their market power over legacy special access services to capture a much larger share of the higher-capacity services. ¹²⁰ As a result, there is no reason to expect that the legacy providers would lack the ability to exercise market power in the provision of such services.

Specifically, history has shown that, as new products achieve commercial success, the incumbent LECs are able to grow quickly by exploiting their nearly ubiquitous networks and extensive financial resources. ¹²¹ For example, it is much easier to convert existing facilities from lower-capacity to higher-capacity than it is to deploy new facilities "from scratch." The incumbent LECs also can leverage their exorbitant revenues from lower-capacity services to temporarily subsidize their higher-capacity services, which would make it even more difficult for alternative providers to compete effectively and operate sustainably in the market. In addition, the incumbent LECs clearly can (and do) use the "lock-up" and other unreasonable terms and conditions in existing service agreements to make it uneconomical for customers to purchase higher-capacity services, especially Ethernet services, from an alternate provider. ¹²²

See COMPTEL Comments at 7 (explaining that "a firm with market power [over TDM services] can preserve its market power over a newer service that relies to a great extent on the same existing facilities from which it derives its market power over a legacy [TDM] service"); Susan M. Gately and Helen E. Golding, *The Benefits of a Competitive Business Broadband Market*, at 11, S.M. Gately Consulting LLC (Apr. 2013), http://thebroadbandcoal ition.com/storage/benefits-of-broadband-competition.pdf ("Nothing about the change in transmission technology (from TDM to packetized) fundamentally alters the economic barriers and market conditions that relate to last-mile facilities.") ("SMGC Report").

¹²¹ Sprint Reply Comments at 32-33.

¹²² See infra at section VII.

The Commission's traditional market power analysis inquiry "typically involves the consideration of providers' market shares, supply and demand elasticity, and carriers' cost structures, size, and access to resources." As explained above, application of this analysis to the special access marketplace leaves no doubt that the incumbent LECs possess market power.

- The special access marketplace is highly concentrated, and the incumbent LECs hold excessively high market shares.
- Low supply and demand elasticities prevent natural marketplace forces from functioning effectively.
 - o Most often, there are *no* competing facilities-based suppliers of special access services in a location or census block.
 - o Effective facilities-based competition exists in only very limited areas.
 - o Potential competition is insufficient to constrain the incumbent LECs' behavior, primarily due to the incredibly high barriers to entry that new entrants face.
- The incumbent LECs continue to enjoy significant entrenched advantages due to their historic monopolies.

VI. ADDITIONAL EVIDENCE BOLSTERS THE FINDING OF CONTINUED INCUMBENT LEC MARKET POWER

AT&T correctly explained in the petition that initiated the present proceeding nearly fifteen years ago that "large ILECs . . . retain pervasive market power in the provision of [special access] services" and "are abusing that market power with patently unjust and unreasonable rates." ¹²⁴ Unfortunately, substantial other analyses and evidence presented over the intervening years confirm that this statement is still true and confirm the results of the data analysis described

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Special Access for Price Cap Local Exchange Carriers: AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, Report and Order and Further Notice of Proposed Rulemaking, 27 FCC Rcd. 16,318, ¶ 60 (2012).

¹²⁴ AT&T Corp. Petition for Rulemaking at 1, RM-10593 (Oct. 15, 2002).

in the previous sections: incumbent LECs continue to possess and exercise overwhelming market power over special access services.

For example, both the National Regulatory Research Institute ("NRRI") and Government Accountability Office ("GAO") have found that the market for special access services is concentrated and dominated by the incumbent LECs. In particular, the NRRI examined both market share and market concentration and concluded that "ILECs maintain strongly dominant market shares for DS-1 channel terminations" and "dominant market shares for DS-1 transport," DS-3 channel terminations, and DS-3 transport. The NRRI further found that "all four special access markets are 'highly concentrated' under the standards contained in the [DOJ's] Merger Guidelines." Based on these findings, the NRRI concluded that "ILECs still have strong market power in most geographic areas."

Similarly, the GAO found that "facilities-based competition for dedicated access services to end users at the building level (*i.e.*, analogous to channel terminations to end users) does not appear to be extensive." This is likely due, at least in part, to barriers to entry and restrictive terms and conditions in the incumbent LECs' contracts. The GAO specifically noted that the "apparent limited competition at the building level could be caused by a variety of factors, including the high sunk costs—that is, costs that once incurred cannot be readily recovered—of constructing local networks, the cost of local government regulations, and limited access to

¹²⁵ NRRI Report at 45-46.

¹²⁶ *Id*.

¹²⁷ *Id.* at iii.

GAO Report at 19, 30; *see also id.* at 13 ("Limited competitive build out in these MSAs could be caused by a variety of entry barriers, including zoning restrictions, or difficulties in obtaining access to buildings from building owners that discourage competitors from extending their networks.").

buildings."¹²⁹ The GAO also noted that "unless a competitor can meet the customer's entire demand, the customer has an incentive to stay with the incumbent and to purchase additional circuits from the incumbent, rather than switch to a competitor or purchase a portion of their demand from a competitor—even if the competitor is less expensive."¹³⁰ With respect to pricing, the GAO notably concluded that "prices and average revenues are higher, on average, in phase II MSAs—where competition is theoretically more vigorous—than they are in phase I MSAs or in areas where prices are still constrained by the price cap."¹³¹

More recent analyses also demonstrate that the incumbent LECs continue to exercise market power. For example, Windstream recently submitted a white paper prepared by CostQuest that demonstrates that the incumbent LECs continue to enjoy significant advantages in competing for business service customers that directly result from the "ILEC first mover advantage rooted in the monopoly era." Among other findings, the CostQuest study disclosed that: (1) the "revenue required to support CLEC overbuilding of . . . last-mile fiber facilities—in the face of the lower market shares that CLECs can expect—remains prohibitively high for most business locations"; (2) "current wholesale Ethernet prices may exceed retail Ethernet prices in some locations"; and (3) a "CLEC's fiber build project costs . . . often are greater than if the ILEC deployed fiber in the same area." Because these benefits are not restricted to legacy

¹²⁹ *Id.* at 26.

¹³⁰ *Id.* at 30.

¹³¹ *Id.* at 13.

Letter from Jennie B. Chandra, Vice President - Public Policy and Strategy, Windstream Services, LLC, to Marlene H. Dortch, Secretary, FCC, at 2, WC Docket No. 05-25 (filed June 8, 2015) ("Windstream Submission").

¹³³ *Id.* at 2, 6.

technologies, the incumbent LECs also "hold a significant cost advantage even for 'new' fiber builds," thereby further "expos[ing] the flaw in the ILECs' argument that CLECs are on equal competitive footing when it comes to Ethernet." ¹³⁴ Moreover, Windstream correctly noted that the incumbent LECs "cement their advantage [by using] lock-up agreements to leverage locational monopolies across entire markets." ¹³⁵

Importantly, Ofcom, the communications industry regulator in the United Kingdom, also has undertaken regular examinations of market power in the provision of leased line services, which are roughly equivalent to U.S. special access services, and found that even at lower levels of dominance than found in the United States, regulatory intervention was necessary. ¹³⁶ In Ofcom's experience, "the most important factor that determines the emergence of leased lines access competition is the amount and density of rival infrastructure." ¹³⁷ Ofcom generally has concluded that an incumbent possesses market power unless there are both (1) upwards of two rivals to the incumbent in the relevant market, and (2) a high density of business sites (higher than 50-70 percent) in a given geographic area that are within reach of rivals' infrastructure. ¹³⁸ For example, Ofcom found that the incumbent had market power when it possessed 74 percent of

¹³⁴ *Id.* at 6 (emphasis excluded).

¹³⁵ *Id.* at 7.

¹³⁶ See Ofcom, Business Connectivity Market Review – Final Statement (Mar. 28, 2013), http://stakeholders.ofcom.org.uk/consultations/business-connectivity-mr/final-statement/ ("Ofcom 2013"); Ofcom, Business Connectivity Market Review (May 15, 2013), http://stakeholders.ofcom.org.uk/consultations/bcmr-2015/ ("Ofcom 2015").

Letter from Sheba Chacko, Head of Americas Regulation and Global Telecoms Policy, BT Americas Inc. to Marlene H. Dortch, Secretary, FCC, at 1, WC Docket No. 05-25 (filed June 3, 2015) ("BT Filing"); *see also* Ofcom 2015 ¶ 4 n.84 (noting that "rival infrastructure is the main determinant of competition").

¹³⁸ BT Filing at 1.

the share by volume, a ubiquitous network, and there were high barriers to entry and expansion. 139

These findings, which are notable in their consistency, demonstrate precisely what the data collected by the Commission and the record in this proceeding disclose: there is insufficient competition in the special access marketplace due to the incumbent LECs' ongoing ability to leverage their entrenched advantages and market power in unjust, unreasonable, and discriminatory ways. Collectively, these findings also serve to bolster the conclusions from analyzing the data collection and suggest that special access services will remain noncompetitive, unless and until the Commission intervenes.

VII. THE TERMS AND CONDITIONS IMPOSED BY THE INCUMBENT LECS FURTHER BUTTRESS THEIR DOMINANCE IN THE SPECIAL ACCESS MARKETPLACE

As purchasers and competitive providers of special access services long have argued and the data collection responses now confirm—incumbent LECs routinely use anticompetitive terms and conditions to preserve and expand their dominance over special access services. These terms and conditions convert incumbent LEC special access plans into competition-killing loyalty mandates: they require customers to maintain their prior purchase levels and commit new demand to the incumbent LEC, drastically reducing the possibility of competitive entry for everyday special access business. Using loyalty mandates, the incumbent LECs have already crippled wireless and wireline broadband competition supported by TDM special access services, and are now using similar unjust and unreasonable tactics to interfere with the country's evolution to IP-based networks.

¹³⁹ Ofcom 2013 ¶¶ 1, 29.

The data collection responses outline the mechanisms incumbent LECs use to undermine competition. By requiring customers to accept, and remain subject to, loyalty commitments, the incumbent LECs undermine the ability of new entrants to compete in the special access marketplace, and allow incumbent LECs to leverage their historic dominance over TDM-based special access services to further dominate the market for IP-based special access services. The data collection responses also discredit the tired claim that incumbent LEC loyalty provisions are "simple term plan[s]" or "volume commitments" that promote competition. Given the immense harm to competition and lack of countervailing pro-competitive benefits, the Commission must determine that incumbent LEC loyalty provisions are unjust and unreasonable.

A. The Mechanics of Incumbent LEC Loyalty Mandates

Unconstrained by adequate competition, incumbent LECs use their ability to set prices to force customers into loyalty plans using at least two techniques. First, incumbent LECs set "rack rates" for special access plans that are unmoored from commercial reality—a business-killing "MSRP" that few customers do or could ever pay. The incumbent LECs then condition relief from their exorbitant rack rates on a buyer's acceptance of a loyalty commitment. Second, incumbent LECs charge excessive "move" penalties or per-circuit early termination fees that impose huge costs when customers respond to normal retail churn by switching circuits from one location to another, even if the customer purchases from the incumbent LEC at the new location.

Letter from Keith M. Krom, General Attorney and Associate General Counsel, AT&T, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket No. 05-25 (filed Oct. 13, 2015); Letter from Robert C. Barber, General Attorney AT&T, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket No. 05-25 (filed Oct. 10, 2014).

Reply Comments of CenturyLink, Inc. at 27, WC Docket No. 05-25 (filed Mar. 12, 2013) ("CenturyLink Reply Comments"); Reply Comments of Verizon and Verizon Wireless at 24, WC Docket No. 05-25 (filed Mar. 12, 2013) ("Verizon Reply Comments").

Incumbent LECs will then "waive" these penalties to offer "circuit portability," but only if the customer makes a loyalty commitment that undermines future competition.

The loyalty provisions that customers are forced to accept require them to commit for an extended term to purchasing as much as 95 percent of their existing purchase levels from the incumbent LEC. Once a customer becomes subject to a loyalty commitment, the incumbent LECs deploy a variety of tools to ensure that the customer remains locked-in. For example, if a customer misses its commitment during a review period, the incumbent LEC will enforce a punitive "shortfall" penalty, which can far exceed the amount by which the customer missed its loyalty commitment. If a customer wants to reduce its commitment, it may have to pay an enormous "buydown" penalty, which can similarly cost the customer more than it would pay by maintaining the loyalty commitment. Incumbent LECs also impose "overage" penalties that punish customers for exceeding their loyalty commitment, but will waive these penalties if the customer increases its purchase commitment level going forward. By forcing the customer to keep incremental demand with the incumbent LEC, this construct ensures that growing businesses cannot amass enough new demand to spur competitive entry.

1. Using Their Market Power, Incumbent LECs Impose Unreasonable "Rack Rates" and Restrictions on Circuit Portability

As described in detail above, the data collection confirms what competitive providers have experienced in the marketplace for years: high prices and onerous terms for special access service exist against a backdrop of entrenched and far-flung incumbent LEC market power in the vast majority of the country. Without enough competition to discipline their behavior, incumbent LECs with pricing flexibility have wide latitude to set the rates and terms of service.

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See, e.g., Sprint Reply Comments at 24; Comments of Level 3 Communications, LLC at 7-8, WC Docket No. 05-25 (filed Feb. 11, 2013) ("Level 3 Comments").

The data collection demonstrates that, through pricing plan schemes and configuration gimmicks, incumbent LECs use this pricing power to force consumers into loyalty mandates while maintaining the appearance of a voluntary commitment.

Specifically, for month-to-month service without a loyalty mandate, incumbent LECs impose unreasonably high "rack rates." Responses to the data collection and published tariffs show that these rack rates wildly exceed the price that a competitive market would produce. In fact, not only are reported rack rates greater than what customers would pay in a competitive market, but they are also not economically viable for many purchasers. For example, tw telecom reports that it is simply "not possible" to provide retail business services "by serving off-net locations via *ILEC* special access services purchased at undiscounted" rack rates. ¹⁴⁴ Similarly,

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See Sprint Comments at 13, 33, 35, 39; *** BEGIN CONFIDENTIAL ***

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¹⁴⁴ tw telecom Response to Request II.F.8 at 1.

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¹⁴⁶ See Designation Order ¶ 19 n.54 (noting that, because purchasers do not fully internalize the cost to competition that results from their agreement to a loyalty discount, sellers can "list prices above monopoly levels and offer[] discounts so the monopoly price is paid").

surprising that only a small percentage of purchasers pay them. ¹⁴⁷ Instead, most special access customers proceed with the only option genuinely available to them: a plan with pricing that is somewhat lower than the rack rate (but still supra-competitive), coupled with loyalty provisions that perpetuate incumbent LEC dominance.

Incumbent LECs' terms and conditions also include unworkable circuit portability restrictions designed to coerce customers into accepting restrictive loyalty mandates. Many customers, including Sprint, purchase thousands of circuits at thousands of locations under one incumbent LEC special access plan in order to provide service to a diverse set of end users in a region. During any given period of time, these end users add service at some locations and terminate service at others. In response to these changes in the service requirements of their retail customers, large wholesale special access purchasers must routinely deactivate some circuits and activate new ones, even as the total number of wholesale circuits purchased under the plan for the affected region stays at the same level. Indeed, competitive wireline broadband providers such as tw telecom and Level 3 report an inherent need to switch circuits as customers move locations, or as the provider replaces "retail customers" that "choose[] not to renew . . . service." 148

Some incumbent LECs charge an enormous termination penalty for deactivating individual circuits mid-contract—even if the customer activates another circuit and maintains the same total spend with the incumbent LEC, and even if the deactivated circuit has been in place

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¹⁴⁸ Level 3 Response to Request II.F.8 at 4; see also tw telecom Response to Request II.F.8 at 3.

for several full contract terms already—or a "move" penalty for switching circuits. These switching penalties create the specter of aggregate liabilities that would quickly erode profit margins if applied across a wide range of purchases. In some regions, incumbent LECs exploit the fundamental commercial need to switch circuits by "waiving" switching penalties under so-called "circuit portability" provisions, but will only offer "circuit portability" under a plan that also includes a loyalty commitment. Thus, like rack rates, these circuit portability provisions contrive a false sense of choice as they effectively force customers into a loyalty plan.

2. The FCC Data Confirm that Anticompetitive Shortfall, Buydown, and Overage Penalties Are Widely Used by Incumbent LECs to Entrench Their Marketplace Dominance

Once the incumbent LEC coerces its customers into a loyalty plan, it enforces compliance through provisions that deter migration to competitive providers, even if they charge a substantially lower price. In addition to excessive contract termination charges, incumbent LECs impose steep "shortfall" penalties, which require customers to pay a fee if the purchased circuit volume falls a certain percentage below the committed level. ¹⁵¹ Along the same lines.

¹⁴⁹ See, e.g., *** BEGIN HIGHLY CONFIDENTIAL ***

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See *** BEGIN HIGHLY CONFIDENTIAL ***
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 EarthLink Response to Request II.F.8 at 1; Joint CLEC Comments at 24; Level 3 Comments at 3; XO Comments at 12-13.

See, e.g., Level 3 Response to Request II.F.8 at 2-3; tw telecom Response to Request II.F.8 at 2; *** BEGIN CONFIDENTIAL ***

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incumbent LECs impose "buydown" penalties, which provide customers the "option" to reduce their commitment levels only if they pay a cost-prohibitive penalty. 152

Incumbent LECs insist that these penalties are merely reasonably priced options designed to provide customers with the flexibility of switching to another provider. But the penalty amounts reported by market participants contradict that specious claim. In many cases, purchasers report shortfall penalties "equal to the difference" between actual and committed spend¹⁵³—even though the incumbent LEC no longer provides service—meaning that (1) the penalty has no bearing to the incumbent LEC's costs of service, ¹⁵⁴ and (2) the switch to a cheaper alternative provider will almost never be economic, as the purchaser receives no savings from the incumbent LEC even for circuits no longer in use. ¹⁵⁵ In extreme cases, purchasers report shortfall penalty amounts that are even further disconnected from costs, and that would make switching to a competitive provider even less economically rational. tw telecom, for example, purchases DS1s under an AT&T tariff which imposes a monthly shortfall penalty equal to "approximately *eight times* the average monthly discounted charge for" each termination. ¹⁵⁶

Incumbent LECs also ensure that their customers remain loyal through the use of "overage" penalties. If a customer exceeds its commitment level by a certain amount, incumbent LECs will penalize the customer with massive fees—unless, of course, the purchaser agrees to

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Level 3 Response to Request II.F.8 at 2; *** BEGIN HIGHLY CONFIDENTIAL ***

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¹⁵⁴ Joint CLEC Comments at 23 n.44, 44-45.

¹⁵⁵ Level 3 Response to Request II.F.8 at 3.

¹⁵⁶ tw telecom Response to Request II.F.8 at 4 (emphasis added).

ratchet up its commitment level to reflect the increased purchase amounts, thereby deepening its loyalty commitment. To avoid overage penalties, customers report that they must increase commitment levels over time, which further decreases their capacity to switch circuits to a competitive carrier without triggering shortfall or buydown penalties. Moreover, by allowing the incumbent LEC to "lock up increasing amounts of demand in [its] territory," these penalties prevent customers with growing special access needs from accumulating enough demand to induce entry by a competitor, thus "exacerbating and prolonging [the] harmful effects" of incumbent LEC loyalty mandates. 159

B. Terms and Conditions Put Purchasers in an Impossible Situation that Strangles Competition in the Crib

In the limited situations where an alternative vendor offers special access services, incumbent LEC loyalty mandates inflict immediate damage on customers who cannot take advantage of superior offerings from new entrants that are more efficient or otherwise willing to provide service at a more competitive price or on more favorable terms and conditions. But the enduring harm to competition is more severe. As the data collection makes clear, a facilities-based special access provider, like any new supplier of any other product or service, needs

See tw telecom Response to Request II.F.8 at 2; Level 3 Response to Request II.F.8 at 3; ***

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¹⁵⁸ Level 3 Response to Request II.F.8 at 3.

¹⁵⁹ EarthLink Response to Request II.F.8 at 2.

See, e.g., Letter from Thomas Jones and Matthew Jones, Counsel, Level 3 Communications, LLC, to Marlene H. Dortch, Secretary, FCC, at 4-5, WC Docket No. 05-25 (filed Sept. 23, 2015).

sufficient demand to overbuild last-mile facilities. ¹⁶¹ Because of incumbent LEC loyalty commitments, however, most demand for special access service remains locked up with an incumbent, leaving potential competitors with two options: to pour massive investments into incumbent LEC overbuilds to fight for the tiny share of the market that remains unburdened by an incumbent LEC commitment, or to offer service at prices low enough to overcome the penalties that buyers must pay to switch away from incumbent LECs.

Neither option is economic—even for sophisticated, well-capitalized entrants that are eager to invest. With respect to prior purchase commitments, in the vast majority of geographic areas, most purchasers have been buying from the incumbent LEC for years, and service from the incumbent LEC therefore accounts for a high percentage of their total demand for special access. Thus, to satisfy incumbent LEC volume requirements, these customers must continue to purchase most of their total demand through the incumbent LEC. The same holds true for term commitments, as the long duration of the typical term commitment reduces the amount of unlocked demand for special access services available to a new entrant at any given point of time. As a result, respondents report little excess, unlocked demand available to spur competitive entry in the special access marketplace. 163

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See, e.g., tw telecom Response to Request II.F.8 at 4 (the "combined effect" of incumbent LEC mandates is "to lock tw telecom into purchasing virtually all of the DSIs it needs" from the incumbent LEC); *** BEGIN HIGHLY CONFIDENTIAL ***

While purchasers subject to loyalty commitments theoretically could free up demand for alternative vendors by paying termination fees or shortfall penalties, "buying down" reductions in their commitment levels, or paying any applicable circuit migration charges, the magnitude of the reported penalties makes it "virtually impossible" for alternative vendors "to compete for the demand that is subject to these commitments." This is because to gain the business of an incumbent LEC customer, a competitive provider would have to offer service at rates low enough to overcome the immense costs associated with the switch. As Level 3 reports, these rates make entry uneconomic in all but the most extreme business cases. Indeed, as described in more detail below, Sprint had to issue a network-wide re-bid for wireless backhaul to attract rates low enough to overcome these penalties at all, and even then Sprint could only obtain these rates in a select number of locations.

Just as shortfall and buydown penalties lock up *existing* demand with the incumbent LEC, overage penalties earmark *future* growth in special access services for the incumbent LEC. Because of overage penalties, a customer with increasing special access needs cannot simply purchase additional circuits from the incumbent LEC on a month-to-month basis as it waits for competitive options to develop. It must also pay enormous penalties if it exceeds the overage thresholds specified in the incumbent LEC's special access plan. To avoid these inflated charges, purchasers must commit their incremental demand to the incumbent LEC, as described

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Level 3 Response to Request II.F.8 at 3.

¹⁶⁵ See id.

above. This substantially reduces the possibility that customers will eventually amass enough uncommitted demand to spur competitive entry. 166

Because so much demand for special access services remains committed to an incumbent LEC, everyday marketplace conditions rarely support the entry needed to discipline incumbent LEC rates and terms and conditions. In response to these conditions, Sprint took an unprecedented and extreme action to try to elicit special access competitive entry through its Network Vision program. As part of Network Vision, Sprint committed itself to a network-wide rebid of nearly its entire wireless backhaul system, leveraging the size, resources, and wireless footprint that separates Sprint from many other buyers of incumbent LEC special access to achieve unparalleled scale as a special access buyer.

But even this extraordinary effort proved incapable of introducing effective competition. While Sprint was able to attract a few alternative vendors in some locations, ultimately the majority of its backhaul circuits and expense remain with the incumbent LEC, despite designing a huge, new program to avoid that result. For many cell sites, Sprint simply had to continue its existing service—incumbent LEC-supplied TDM backhaul in most cases—because Sprint did not receive any Ethernet bids at all. Moreover, because of the penalties imposed under incumbent LEC loyalty mandates, Sprint faced enormous costs to migrate even this small percentage of backhaul to the new alternative vendors. And, dishearteningly, the incumbent LEC did not always adjust its prices even in areas where Sprint did receive a bid from a competing supplier. Incumbent LEC dominance is so strong that it could simply ignore the competitor, because the limited locations up for grabs were too small to cause the incumbent

See id; tw telecom Response to Request II.F.8 at 4; EarthLink Response to Request II.F.8 at 1.

LEC concern. Unsurprisingly, these dampened competitive dynamics produced supracompetitive pricing even in areas where a competitor emerged—areas that include Sprint's most expensive market.

The underwhelming impact of Sprint's Network Vision effort provides further proof of the extent to which incumbent LEC terms and conditions have foreclosed competitive entry at the scope and scale necessary to produce just and reasonable rates. Not every company can attempt to tear down the walls to competition erected by incumbent LEC terms and conditions in this manner—nor can Sprint in its day-to-day wireless operations. Sprint's wireline business, like that of other competitive wireline broadband providers, is even less capable of generating the massive scale of Network Vision, because wireline providers cannot predict which specific commercial buildings their enterprise retail customers will occupy and cannot solicit bids on those locations ahead of time. Even if a competitor could build out to a new location, Sprint would have to provide services using ILEC special access services as new facilities are constructed and installed over a significant period of time. This means paying enormous rack rates, and in some cases, high non-recurring charges, that quickly erode the benefits of switching to a competitive provider, and most likely dissuade competitive entry.

Moreover, even if similar efforts could become a sustainable and regular feature of the special access marketplace, Sprint's experience shows that the demand generated by such efforts still would not yield enough alternatives to adequately check the incumbent LECs' anticompetitive conduct. Genuine competition simply requires more demand than will ever become available if the incumbent LECs' exclusionary and anticompetitive terms and conditions are allowed to remain in place.

C. Incumbent LECs Use Unjust and Unreasonable Terms and Conditions to Expand and Maintain Market Power in Ethernet Services

Through a variety of means, incumbent LECs are leveraging their dominance over TDM special access to deepen their control of the marketplace for Ethernet services.

First, the data collection demonstrates that incumbent LECs are leveraging the unreasonable terms and conditions contained in their TDM plans to unjustly advantage their Ethernet service plans over those of competitors. Respondents to the data collection report that

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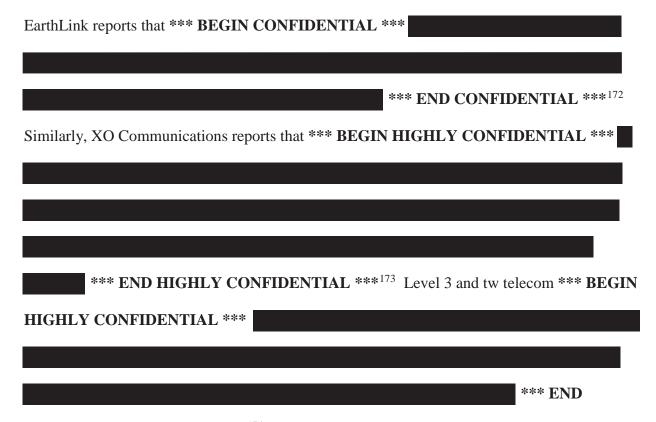
Incumbent LECs achieve the same result through so-called "technology migration" provisions in tariffs for TDM special access services. These provisions allow customers seeking to convert a TDM line to Ethernet to decrease their DS1 or DS3 commitment levels so long as the customer commits its Ethernet service to the incumbent LEC. ¹⁷⁰ This gambit works because if a purchaser wants to switch its circuits from TDM to Ethernet, it must contend with incumbent LEC shortfall and buydown penalties that apply when it decreases its TDM purchases. ¹⁷¹ By ensuring that the customer purchases Ethernet from the incumbent LEC rather than a competitor, this strategy effectively uses the incumbent LECs' historical dominance of the TDM marketplace to deepen their control over the Ethernet marketplace.

Second, responses to the data collection demonstrate that where relief from incumbent LEC penalties is unavailable, loyalty plans for TDM special access services reduce demand for Ethernet special access services, thus decelerating the country's advancement to more efficient IP-based networks at the very moment that the FCC is working to support that transition.

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tw telecom Response to Request II.F.8 at 17 ("Some plans do contain limited 'technology migration' provisions, which allow tw telecom to either (1) reduce its *Volume Commitment* level when it upgrades circuits from *DS1* or *DS3* to Ethernet or (2) count circuits upgraded from *DS1* or *DS3* to Ethernet toward its *Volume Commitment*.").

See, e.g., Comments of Windstream Corporation at 8-9, GN Docket No. 13-5 (filed Mar. 31, 2014); Comments of Sprint Corporation at 4 n.7, GN Docket No. 13-5 (filed Feb. 5, 2015); Letter from Thomas Cohen, Counsel, XO Communications, LLC to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 (filed June 5, 2015); Letter from Angie Kronenberg, Chief Advocate and General Counsel, COMPTEL to Marlene H. Dortch, Secretary, FCC, at 8 n.31, GN Docket No. 13-5 (filed Apr. 2, 2014).



HIGHLY CONFIDENTIAL ***¹⁷⁴ The intent and combined effect of incumbent LEC loyalty commitments, technology migration provisions, and overlay agreements appears to be to carefully meter the IP transition, even at the cost of delaying it to ensure that the incumbents can appropriate any new Ethernet business, limit competition, and maintain their market power over dedicated broadband services.

Finally, incumbent LECs have already begun to impose the same types of anticompetitive terms and conditions in Ethernet special access contracts that for years have been included in TDM agreements. Many of Sprint's incumbent LEC Ethernet contracts impose enormous early

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termination penalties that bear no relationship to underlying costs, while also prohibiting Sprint from switching services to a competitor. Indeed, under one contract, Sprint can disconnect a given Ethernet circuit with the incumbent LEC without a penalty only if Sprint agrees to either self-provision or use existing TDM-based services from the incumbent—in other words, as long as Sprint explicitly commits itself not to switch to an alternative Ethernet provider.

D. Incumbent LEC Loyalty Provisions Are Unjust and Unreasonable

The Commission has determined that exclusive agreements which "harm competition and consumers" are unjust and unreasonable, unless they confer enough "countervailing benefits" to outweigh their competitive harm. ¹⁷⁵ As explained above, incumbent LEC loyalty commitments have locked up so much demand for wholesale special access services that it is extremely difficult for even large special access purchasers to generate the scale needed to induce market-disciplining competition. Incumbent LEC loyalty commitments are also undermining competition for Ethernet special access services, delaying the transition to IP networks and the creation and adoption of the advanced broadband applications those networks support, and

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Wireless Communications Association International, Inc. Petition for Rulemaking to Amend Section 1.4000 of the Commission's Rules to Preempt Restrictions on Subscriber Premises Reception or Transmission Antennas Designed to Provide Fixed Wireless Services et al., First Report and Order and Further Notice of Proposed Rulemaking in WT Docket No. 99-217, Fifth Report and Order and Memorandum Opinion and Order in CC Docket No. 96-98, Fourth Report and Order and Memorandum Opinion and Order in CC Docket No. 88-57, 15 FCC Rcd. 22,983, ¶ 35 (2000) (finding that "a carrier's agreement" to an "exclusive contract[] for telecommunications service in commercial settings" is "an unreasonable practice," where the contract "impede[s] the pro-competitive purposes of the 1996 Act and appear[s] to confer no substantial countervailing public benefits") ("Competitive Networks Order"); Promotion of Competitive Networks in Local Telecommunications Markets, Report and Order, 23 FCC Rcd. 5385, ¶ 5 (2008) (prohibiting enforcement of exclusive agreements to provide telecommunications services to residential customers in multiple tenant environments) ("MDU Exclusivity Order").

threatening competition in downstream markets for wireless and wireline broadband services that rely on wholesale special access as a critical input.

Against this backdrop of competitive harm, the incumbent LECs have offered no legitimate pro-competitive justification for the loyalty commitments they seek to continue to impose. Contrary to the incumbent LECs' claims, their loyalty mandates are not efficiency-driven volume commitments enforced by reasonable, cost-justified penalties, are not entered into voluntarily, and do not meaningfully resemble the terms offered by competitive special access providers. The Commission should therefore conclude that incumbent LEC loyalty plans are unjust and unreasonable, and take steps to allow purchasers subject to these plans to choose providers on the basis of price, service, and quality of service, transition to more advanced networks, and ignite more vibrant competition for retail wireless and wireline broadband services.

1. Incumbent LEC Loyalty Commitments Are Not Pro-Competitive "Volume Commitments"

The incumbent LECs argue that their loyalty mandates are "economically justified . . . volume commitments," because they provide predictable revenue¹⁷⁶ and "scope or economies of scale." This is incorrect. Though facially related to volumes and revenues, a review of the loyalty mandates that incumbent LECs attempt to portray as volume commitments demonstrates that these terms are not discounts tied to increased volumes at all. To the contrary, they are carefully crafted volume-insensitive mechanisms that foreclose entry by locking up customers and increasing the cost of competitive entry.

¹⁷⁶ CenturyLink Reply Comments at 27; Verizon Reply Comments at 19.

Reply Comments of AT&T at 37, WC Docket No. 05-25 (filed Mar. 12, 2013) (internal quotations omitted) ("AT&T Reply Comments").

Under a true volume discount, the supplier offers a lower price for the purchase of a higher quantity of a product, reflecting the lower cost per unit associated with providing higher quantities. These commitments generally offer lower unit prices for high-volume purchases, 178 because they allow providers to *** BEGIN HIGHLY CONFIDENTIAL ***

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HIGHLY CONFIDENTIAL ***¹⁷⁹ Loyalty mandates, on the other hand, do not offer discounts for higher volumes, but instead work to lock customers into their current rate of spend, whatever the starting volume may be. This is the precise function of the incumbent LEC loyalty commitments reported in response to the data collection.

Rather than relating pricing to the absolute number of circuits purchased by the customer, incumbent LEC commitments tie pricing to the customer's agreement so that they do not substantially reduce its previous spend level going forward. Prices are therefore not linked to lower per-unit costs but instead to loyalty. As Sprint has mentioned previously, "[i]t costs no more to provide 10 DS1s to a small but loyal customer than to provide 10 DS1s to a large but 'disloyal' customer that shifts the remainder of its lines to a competitor." Furthermore, incumbent LEC prices cannot be explained as reflecting only differences in economies of scale. Incumbent LEC networks already reach the vast majority of locations in their footprint, and unlike competitors, adding customers typically does not require incumbent LECs to build out new facilities. Nevertheless, under the incumbent LECs' loyalty provisions, the disloyal

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¹⁷⁸ See *** BEGIN HIGHLY CONFIDENTIAL ***

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¹⁸⁰ Sprint Comments at 26.

customer would face a stiff penalty for migration. Along the same lines, under these claimed volume discounts, a customer that purchases 1,000 lines but does not meet its loyalty commitment would pay more than a customer that purchases 100 lines but does meet its loyalty commitment, resulting in a volume *penalty* that the incumbent LEC's concocted competitive justification cannot explain.¹⁸¹

The incumbent LECs also claim that loyalty provisions are justified because they promote revenue predictability and certainty. These claims are also incorrect. First, while loyalty mandates unquestionably protect incumbent LECs' cash flows, it does not follow that they are just and reasonable. Less problematic terms, such as *true* volume commitments, would also provide incumbent LECs with predictability without foreclosing the possibility of entry by lower cost or more efficient competitive providers. Even terms that require customers to commit to a smaller, more reasonable percentage of their current demand from an incumbent LEC would leave customers with some flexibility to use multiple providers while also promoting revenue predictability. Second, while respondents to the data collection agree that capacity commitments from customers can encourage deployment of new facilities, many of the facilities used to supply TDM-based special access services are now fully depreciated. Commitments that absorb the vast majority of a customer's demand well past the point of repayment do not have any plausible pro-competitive rationale. Finally, predictability and certainty are never guaranteed in a truly competitive market. In a competitive market, providers

¹⁸¹ See *** BEGIN HIGHLY CONFIDENTIAL ***

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Stanley M. Besen and Bridger M. Mitchell, *Anticompetitive Provisions of ILEC Special Access Arrangements*, ¶ 47, appended as App. A to Joint CLEC Comments ("Besen/Mitchell Anticompetitive Provisions Paper").

¹⁸³ See generally Responses to Request II.A.8.

must rely on price, quality of service, and innovative products to fully secure future revenue, and not one-sided contractual terms that give the seller a stronghold on purchasers of the service.

High incumbent LEC overage fees, waived upon rolling excess purchases into a higher volume commitment, add to the unreasonableness of incumbent LEC loyalty mandates because they ensure that customers commit growth in demand to the incumbent LEC, thereby further reducing the chance that sufficient, uncommitted demand will develop and permit competitive entry. Put simply, although incumbent LECs have the opportunity to offer reasonable volume provisions genuinely tailored to the benefits of predictable and certain investment returns, they choose not to. Instead, the incumbent LECs have implemented anticompetitive terms that lock-up nearly *all* current and future demand for special access—terms whose injury to competition far outweighs whatever claimed benefit they bring to the incumbent LEC. 184

2. Incumbent LEC Penalties Are Excessive and Have No Reasonable Economic Basis

Incumbent LECs claim that their early termination, shortfall, buydown, and overage penalties merely recover the cost of deploying special access facilities, and "enforce the bargain struck" when a customer "chooses" a plan with term and volume commitments.

This claim is also incorrect for two principal reasons.

First, the size of the penalties reported in the data collection demonstrates that incumbent LEC termination fees bear no relationship to costs. The primary economic justification of a termination penalty is to allow the supplier to recoup sunk costs associated with providing

See Sprint Comments at 27; Einer Elhauge and Abraham L. Wickelgren, Robust Exclusion Through Loyalty Discounts, Harvard Law School, John M. Olin Center for Law, Economics, and Business, Discussion Paper No. 662, at 2-3 (Jan. 2010), http://www.law.harvard.edu/faculty/elhauge/pdf/Elhauge_662.pdf.

¹⁸⁵ Verizon Reply Comments at 25; *see* AT&T Reply Comments at 32.

service to a customer—a recovery that the supplier builds into recurring charges over the life of a contract, and must partially forgo if the customer terminates a contract early. However, in many special access plans, termination penalties far exceed any plausible sunk cost associated with providing service to a particular customer. Indeed, many of these fees exceed the monthly rate under the relevant loyalty plan—by as much as 800 percent under some tariffs. Moreover, from the record, it appears that no incumbent LEC offers customers the option of covering sunk costs on a *non*-recurring basis and proceeding month-to-month, even though an incumbent LEC genuinely concerned with recouping costs would be indifferent between that arrangement and a term plan with a reasonable termination fee. Instead, incumbent LECs merely offer potential purchasers the "option" of going month-to-month at cost-prohibitive, supra-monopolist rack rates or subscribing to a term commitment with an excessive termination penalty.

Second, some of the reported penalties are also much higher than needed to "enforce" the imaginary "bargain" that customers made by committing to terms and volumes. Under several special access plans, the incumbent LEC determines the termination penalty based on the rack rate, and *not* the "bargained for" discount rate that customers actually pay under their contract. ¹⁸⁹ As a result, these penalties *exceed* the cost of simply covering all remaining payment obligations under the contract. Incumbent LEC claims that termination penalties require the customer "to give up only a portion of the savings it received as a result of its original commitment" are

¹⁸⁶ Besen/Mitchell Anticompetitive Provisions Paper ¶¶ 57-61.

¹⁸⁷ tw telecom Response to Request II.F.8 at 4.

¹⁸⁸ See Besen/Mitchell Anticompetitive Provisions Paper ¶¶ 57-61.

¹⁸⁹ See, e.g., Level 3 Response to Request II.F.8 at 4-5 n.17; tw telecom Response to Request II.F.8 at 5 n.17.

therefore misleading and beside the point. ¹⁹⁰ Not only do the incumbent LECs disregard that these purported "savings" are measured against unreasonable base offerings set by fiat, they also ignore the fact that the reported termination penalties give incumbent LECs *more* than the full benefit of the original "bargain," ¹⁹¹ transforming at least plausibly efficient "take-or-pay" provisions into facially unjustified "take-or-pay-more" commitments. ¹⁹² Similarly, the incumbent LECs have set overage charges that bear no relationship to the amount necessary to prevent customers from committing to an artificially low spend. Instead, the severity of overage penalties ensures that customers commit new special access purchases to their existing loyalty plan rather than engage a competitor, and ramp up incumbent LEC commitment levels when a contract is renewed.

At bottom, reported penalty amounts are far greater than necessary to achieve any efficiency claimed by the incumbent LEC. The only purpose they serve is to lock-up current and future demand in the special access marketplace. Indeed, under some plans, if a customer switches to another provider with two years left on its contract with the incumbent LEC, the penalties would approximate a full year of charges per affected circuit. No competitor could offer service at a price low enough to overcome such severe penalties—which is the *only* plausible explanation of the penalty rates the incumbent LECs have chosen. ¹⁹³

¹⁹⁰ Verizon Reply Comments at 25.

¹⁹¹ *Id*.

Sprint Comments at 34; *** BEGIN HIGHLY CONFIDENTIAL ***

*** END HIGHLY CONFIDENTIAL ***

¹⁹³ *See*, *e.g.*, Farrell Decl. ¶¶ 5-12.

3. Similar Terms and Conditions Do Not Appear in Contracts for Special Access Services Provided by Competitive Providers

Contrary to arguments the incumbent LECs have made for years, loyalty commitments in special access service agreements are not a natural response to competition. Rather, loyalty commitments highlight the absence of competition. Indeed, out of 566 non-incumbent data request respondents—all of whom face competition from, at minimum, an incumbent LEC—*** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL ***194 The reason is simple: non-incumbent providers lack the market power needed to impose unreasonable terms and conditions. As a host of small competitive providers explains, *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL ***195 In addition, *** BEGIN HIGHLY CONFIDENTIAL *** END HIGHLY 194 See *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL ***; *** BEGIN CONFIDENTIAL *** *** END CONFIDENTIAL *** 195 *** BEGIN HIGHLY CONFIDENTIAL ***

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CONFIDENTIAL ***¹⁹⁶ And, according to Level 3 and tw telecom, "Competitive Providers serve only a relatively small number of locations with their own network facilities, generally face competition from multiple facilities-based competitors in every location in which they do offer such service, are unable to impose high undiscounted rates on buyers, and are therefore unable to lock up large volumes of demand."¹⁹⁷

By contrast, some competitive providers—including *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL *** 198—do offer genuine volume discounts to their customers. These discounts—which are more easily justified on grounds of efficiency, and comparable to practices in competitive marketplaces 199_**** BEGIN CONFIDENTIAL *** *** END CONFIDENTIAL ***200 196 *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL *** ¹⁹⁷ Level 3 Response to Request II.A.18 at 2; tw telecom Response to Request II.A.18 at 2. 198 See *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL *** 199 See *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL *** 200 *** BEGIN CONFIDENTIAL *** *** END CONFIDENTIAL ***; *** BEGIN HIGHLY CONFIDENTIAL *** *** END HIGHLY CONFIDENTIAL ***

Loyalty commitments, as discussed above, have no legitimate economic justification, which is why they cannot exist in truly competitive markets. Indeed, *** BEGIN HIGHLY

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*** END HIGHLY CONFIDENTIAL ***²⁰¹ Accordingly, *** BEGIN
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CONFIDENTIAL ***²⁰² Rather, as Level 3 and tw telecom report, incumbent LEC loyalty commitments are "not based on a true commercial negotiation but instead on the ILEC's ability, through its market power, to extract significant concessions from customers that deprive *Competitive Providers* of the ability to compete for large amounts of *Dedicated Services* business."²⁰³

*** BEGIN HIGHLY CONFIDENTIAL ***

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competitive providers' terms and conditions make it clear that incumbent LEC loyalty commitments are unjust, unreasonable, and unsustainable in truly competitive markets.

^{201 ***} BEGIN HIGHLY CONFIDENTIAL ***

*** END HIGHLY CONFIDENTIAL ***

²⁰² *Id*.

²⁰³ Level 3 Response to Request II.A.18 at 1; tw telecom Response to Request II.A.18 at 1.

^{204 ***} BEGIN HIGHLY CONFIDENTIAL ***

*** END HIGHLY CONFIDENTIAL ***

The position in which Sprint finds itself as a large purchaser of incumbent LEC special access further reveals the gulf between incumbent LEC terms and conditions and the outcomes that would be produced by competitive market forces. No matter which way Sprint turns, it must pay a penalty. Sprint is penalized if it buys too much special access, a counter intuitive situation rarely found in genuinely competitive environments. Sprint is penalized if it buys too little special access, or if it buys any amount—large or small—that does not involve a loyalty commitment. When Sprint marshals its resources to upgrade its backhaul to Ethernet, it is penalized once again for pursuing network efficiency. A competitive marketplace does not punish access, efficiency, and innovation. Yet that is the precise and perverse impact of the terms and conditions that prevail in the special access marketplace today.

VIII. UNREASONABLE SPECIAL ACCESS PRICES, TERMS, AND CONDITIONS UNDERMINE THE COMMISSION'S BROADBAND POLICIES AND HARM CONSUMER WELFARE

Special access services—both TDM-based and Ethernet²⁰⁵—provide "a platform for innovation, investment, and competition in virtually every sector of the economy."²⁰⁶ As the

The TDM services provided by the incumbent LECs—both standalone offerings and inputs to the Ethernet services provided by competitive suppliers—continue to be a critical part of the special access marketplace. These TDM-based special access services are likely to remain the "basic building blocks of business data services for the foreseeable future," at least until such time as packet-based services are made available at competitive rates. *Designation Order* ¶ 13; *see also id.* ¶ 3 ("Market statistics underscore the continued unique role that incumbent LECs play in the provision of TDM-based special access services such as DS1 and DS3 channel terminations, at least on a nationwide basis."). As the Commission recently noted, "[d]espite the growth of newer technologies, preliminary analysis of the Commission's special access data collection shows that revenues from such TDM services continue to make up in the range of sixty percent of the roughly \$40 billion annual special access market." *Id.* ¶ 2; *see also, e.g., id.* ¶ 14 (noting that DS1 and DS3 channel termination sales increased from 2010 to 2013 for some of the largest price cap incumbent LECs and citing an estimate from Vertical Systems Group that the use of legacy business services will remain stable at least through 2017).

²⁰⁶ Joint CLEC Comments at 2.

CEO of INCOMPAS correctly noted, special access services are critical for all "new network builders—wired and wireless" and are "also an issue for the thousands of schools, hospitals, libraries, and government offices around the nation that rely on competitive broadband options that rely on special access services."²⁰⁷ In addition, the Commission recently recognized that "the use of business data services can have a direct impact on the customers of chains or other multi-location businesses that rely on seamless communications between their different geographic locations or, in the wireless marketplace, on the strength of competition that brings them new products or lower prices."²⁰⁸

Because of the pivotal and ubiquitous importance of special access service to virtually every sector of the country's economy, the incumbent LECs' ongoing imposition of unlawful special access prices, terms, and conditions exacts an enormous toll on the nation, undermining the Commission's pro-innovation, pro-competition policies and forcing consumers to bear unjustified costs. The Commission acknowledged the critical impact of special access reform on its public policy objectives when it noted, in commencing the data collection process, that "a comprehensive market analysis will help us to take future steps to support broadband deployment and competition." As we now show, the incumbent LECs' unreasonable prices

²⁰⁷ Chip Pickering, *Here and There, We Need Competition Everywhere*, Morning Consult (Oct. 7, 2015), http://morningconsult.com/opinions/here-and-there-we-need-competition-everywhere/; *see also, e.g.*, COMPETIFY, About, http://trycompetify.com/about/ ("Whenever you use a smartphone, tablet, laptop, desktop, telephone, credit card reader, or ATM, that data must cross facilities controlled by one of a few dominant companies somewhere along the line.") ("Competify"); NASUCA/Rate Counsel March 2013 Reply at 6 ("The special access services that ILECs offer are essential inputs for large businesses, government agencies, and CLECs. End users (e.g., large business users) rely on ILEC-provisioned special access services in order to produce their goods and services.").

²⁰⁸ Designation Order \P 3.

²⁰¹² Suspension Order ¶ 93; see also, e.g., Gary Arlen, 'Competify' Campaign Seeks FCC Action Against 'Scourge' of Broadband Behavior, Broadcasting and Cable (July 13, 2015),

and practices stifle innovation, discourage broadband deployment, suppress competition, impose unjustified costs, and are flatly inconsistent with the Commission's commitment to promoting new investment, job creation, and improved service quality.

Delaying Technological Innovation. The incumbent LECs' continued, and almost exclusive focus on their legacy TDM-based special access offerings should outrage every proponent of American innovation. In a properly functioning marketplace, competition would have compelled the incumbent LECs to upgrade their networks in order to provide the most advanced services possible, such as high-capacity Ethernet-based services. ²¹⁰ Instead, the dearth of competition and effective regulation has given incumbent LECs the incentive and ability to slow down innovation in order to extract maximum profits from their legacy TDM-based services:

While competitors have pushed deployment and innovation in packet-mode services for businesses, incumbent LECs have sought to avoid cannibalizing their more profitable legacy business services, such as high-priced DS3 services. As a result, the largest incumbent LECs have deployed next-generation packet-mode business services more slowly than competitors and only in response to innovations by competitors.²¹¹

http://www.broadcastingcable.com/news/washington/competify-campaign-seeks-fcc-action-against-scourge-broadband-behavior/142507 (reporting the CEO of INCOMPAS's assertion that "competition is a bipartisan, free market principle that should drive our country's broadband policy for the 21st Century so we can deliver better, faster, affordable broadband to all Americans").

Evidence that competition drives innovation can be seen in AT&T's response to Google's gigabit broadband services. For example, after Google Fiber entered the Kansas City area, AT&T built its own fiber network and "clearly aimed its prices to compete with Google Fiber," such that its packages "match exactly Google's speeds and rates." Scott Canon, AT&T to Match Google Fiber Speeds, Prices in Kansas City and Suburbs, Kansas City Star (Feb. 15, 2015), http://www.kansascity.com/news/business/technology/article10441850.html.

Letter from Thomas Jones, Counsel Cbeyond, Inc., EarthLink, Inc., Integra Telecom, Inc., and tw telecom inc. et al., to Marlene H. Dortch, Secretary, FCC, at 4, WC Docket No. 05-25 (filed Nov. 2, 2012); *see also, e.g.*, Letter from Thomas Jones and Matthew Jones, Counsel, tw telecom inc., to Marlene H. Dortch, Secretary, FCC, at 15-16, WC Docket No. 05-25 (filed June 5, 2012) ("tw telecom and some of the other non-ILECs have been far more

Lack of ubiquity and competitive rates for Ethernet services allows incumbent LECs to remain dominant over TDM-based services, ²¹² further stalling the technology transition.

Eliminating the undue profitability from legacy services would encourage technological advances and innovation, such as a more timely transition to IP-based networks and the deployment of 5G mobile services, both of which are Commission priorities.²¹³ Moreover, providing all special access purchasers, including enterprise businesses and competitive broadband suppliers, with higher-capacity connections would foster the development of new services and features that would benefit all end users.

Deployment of 5G Wireless Services. As Chairman Wheeler recently recognized in his testimony before the House Subcommittee on Communications, wireless networks will need to undergo a tremendous densification as they implement 5G technologies.²¹⁴ Indeed, wireless networks of the future will require dramatic densification to accomplish the 1,000 fold increase in capacity anticipated with the deployment of 5G technology.²¹⁵ This densification will require the deployment of tens of thousands new cell sites and each of these cell sites will require

aggressive in marketing Ethernet than has generally been the case with the BOCs. This is likely due to a range of different factors, including the BOCs' historic desire to avoid cannibalizing their legacy services such as ATM, frame relay, and DSn services.").

²¹² See supra n.199.

See, e.g., Technology Transitions Release ¶ 1 (repeatedly emphasizing the Commission's efforts to "further," "speed[]," and "advance" the IP transition "without delay"); Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, et al., Notice of Proposed Rulemaking, 30 FCC Rcd. 11,878, ¶ 1 (rel. Oct 23, 2015) (seeking comment on "a regulatory framework that will help facilitate so-called Fifth Generation (5G) mobile services").

Oversight of the Federal Communications Commission: Hearing before the Subcomm. on Commc'ns and Tech., 114 Cong. 69 (2015) (testimony of Thomas Wheeler, Chairman, FCC).

²¹⁵ See, e.g., Naga Bhushan, et al., Network Densification: The Dominant Theme for Wireless Evolution to 5G, Qualcomm Technologies, IEEE COMMUNICATIONS MAGAZINE, at 82 (Feb. 2014) ("IEEE Network Densification").

connectivity. The "[f]ull benefits of network densification can be realized only if it is complemented by backhaul densification." ²¹⁶

To address this need for backhaul connectivity, carriers are looking at numerous technical solutions. Verizon, for example, recently announced it will rely on dark fiber to connect its deployment of microcells.²¹⁷ The high cost of wired connections, however, presents a very real barrier for wireless carriers to overcome.²¹⁸ While carriers are working to develop alternative technologies, such additional work would not be required if wireless carriers could obtain affordable access to wired connections.

Undermining Broadband Deployment and Competition. The Commission repeatedly has emphasized that special access services are an important input for carriers' broadband service offerings and that the "costs associated with purchasing special access circuits can be a significant expense that impacts a carrier's ability to provide affordable broadband service, particularly to smaller, rural communities." Indeed, the pernicious effects of the incumbent LECs' practices cannot be overstated—they both deter deployment of new competitive broadband networks and deprive consumers of access to affordable broadband service. 220

²¹⁶ *Id*.

²¹⁷ Joey Jackson, *Dark Fiber Key to Future of Small Cells, Backhaul*, RCR Wireless (Dec. 21, 2015).

²¹⁸ See, e.g., IEEE Network Densification at 88 ("Providing wired backhaul to these locations may be cost prohibitive.").

²¹⁹ 2012 Suspension Order ¶ 94; see also, e.g., Qwest Order ¶ 40; FEDERAL COMMUNICATIONS COMMISSION, Connecting America: The National Broadband Plan, at 47-48 (Mar. 17, 2010), https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf.

See, e.g., Reply Comments of the NoChokePoints Coalition at 2, WC Docket No. 05-25 (filed Feb. 24, 2010) ("[B]roadband adoption rates in rural areas are depressed, in part because rural ISPs must charge rates high enough to cover extraordinarily high backhaul costs to reach the Internet backbone.") ("NoChokePoints Reply Comments"); NASUCA/Rate

Notably, special access reform can promote competition in multiple marketplaces, including those that do not depend on the availability of efficient special access services. For example, when "incumbent LECs tie the sale of non-special access services that are subject to competition to the sale of special access services that are not subject to competition, incumbent LECs harm competition in the non-special access service markets."²²¹

Imposing Excessive Costs. One estimate calculates the annual amount of unreasonable special access overcharges to be at least \$10 billion.²²² Furthermore, BT recently pointed out that "Americans are forced to pay twice as much as UK consumers [in a regulated marketplace] for both basic and superfast residential broadband," and Americans also "pay substantially more than consumers in major European economies."²²³

Counsel March 2013 Reply at 9 (noting that the terms and conditions imposed by the incumbent LECs "thwart rather than spur" the deployment of IP-based broadband networks).

²²¹ Joint CLEC Comments at 34.

²²² Competify.

BT Americas, *Special Access: Myths vs. Facts*, at 1 (Sept. 2015), http://trycompetify.com/wp -content/uploads/2015/09/Special-Access-Myths-vs-Facts-Sept-30-2015-FINAL.pdf; *see also, e.g.*, NASUCA/Rate Counsel March 2013 Reply at iii (excessive charges "depress economic activity and cause consumers to pay more than is economically efficient for goods and services that depend on ILEC-provided special access services"); Rate Counsel Comments at 3 ("Consumers ultimately pay for inflated prices either directly to ILECs (in the instance of large consumers) or indirectly in the prices they pay for non-ILEC telecommunications services (the services of competitive [LECs] or of wireless and broadband services, for example) as well as goods and services across the economy. The inefficient rates lead to loss of consumer welfare, and thwart competition."); Reply Comments of Media Action Grassroots Network at 4, WC Docket No. 05-25 (filed Feb. 24, 2010) ("[T]he high cost of special access prices trickles down to the consumer who either will not have broadband deployed to his or her community or has to pay higher prices for broadband Internet access.").

These unnecessary costs impair the ability of competitive LECs, both wireless and wireline, to compete effectively in retail telecommunications marketplaces. ²²⁴ They also raise the costs of commercial companies, such as the members of the Ad Hoc Telecommunications Users Committee, who ultimately must recover those costs from the prices paid by consumers for their products. ²²⁵ Further, these excessive charges impact not-for-profit and governmental entities, including schools and universities, hospitals, public safety organizations, government agencies, and others that rely on special access services. In addition to the direct monetary costs, which are significant, the opportunity costs associated with these unwarranted assessments have ripple effects throughout American society. For example, a rate reduction could provide universities with "additional funds to restrain tuition increases, hire more educators, and pay for new facilities" and permit hospitals to "invest in advanced medical technologies or hire additional staff." ²²⁶

See, e.g., Ellen Muraskin, Competify Group: Release of FCC Data Will Prove ILECs Exploit Monopoly Market Power, Channel Partners (Oct. 8, 2015), http://www.channelpartnerso nline.com/blogs/ellen-muraskin-blog/2015/10/competify-group-release-of-fcc-data-will-prove-il.aspx (quoting Sprint's Charles McKee as indicating that Sprint "want[s] to compete, but it is difficult to do that when you are subsidizing your competitors."); Windstream Submission at 7 ("Wholesale prices that significantly exceed the retail prices for equivalent capacities can preclude CLECs from competing in the retail market, which would leave the incumbent with little or no retail competition for high capacity business services.").

See, e.g., Comments of the Ad Hoc Telecommunications Users Committee at 6, WC Docket No. 05-25 (filed Aug. 8, 2007) ("[T]he Commission's failure to act in the face of the carriers' overcharges is now costing business customers \$22.7 million per day, based on the most recent data filed by the carriers."); Comments of the Ad Hoc Telecommunications Users Committee at 3 n.8, WC Docket No. 05-25 (filed Feb. 24, 2010) (noting that individual Ad Hoc members reported that they annually bill more than \$250 million for DS1 and DS3 circuits alone and that Committee-wide demand for these services is likely to be at least twice as great).

²²⁶ NoChokePoints Comments at 5.

Importantly, a reduction in the prices that schools and libraries participating in the Commission's E-rate program pay for special access services would enable them to maximize the benefits they receive from that program. In turn, students and community members would realize the benefits of a more efficient and effective E-rate program.

Undermining the Telecommunications Marketplace and Overall U.S. Economy. The record in this proceeding contains a variety of estimates on the adverse effects that the current special access prices and other terms have on the performance of the telecommunications marketplace. One report concluded that "investment and job creation in the telecommunications sector has lagged behind the economy as a whole." Similarly, Drs. Besen and Mitchell previously have pointed out that the special access loyalty and tying provisions imposed by the incumbent LECs can lead to reduced investment in research and development. This is because competitive providers "anticipate that future sales will not be adequate to justify such investments."

More broadly, reforming the current special access regime could promote innovation in virtually every sector of the country's economy. Such comprehensive reform, for example, would "allow manufacturing companies to invest in retooling or hiring additional employees to expand production and increase sales, rather than wasting money on excessive special access prices or being forced to bear the substantial costs of self-provisioning telecommunications

²²⁷ SMGC Report at iii.

²²⁸ Joint CLEC Comments at 33; *see also*, *e.g.*, NoChokePoints Reply Comments at 5-6 ("Every dollar that a special access purchaser overpays to a price cap LEC for special access is a dollar that is not available to deploy new technology to consumers, upgrade other facilities, construct a new cell site, or invest in research for innovative new products.").

services."²²⁹ Similarly, special access relief would "lower the costs of launching businesses, which will lead to a cycle of more startups, more jobs, and more innovation,"²³⁰ and would "provide small businesses with affordable access and choice regarding the services they need to grow and create new jobs."²³¹ Indeed, one report concluded that "a 50% reduction in [s]pecial access prices would result in a \$20-\$22 billion increase in U.S. output, a \$4.4-\$4.8 billion increase in employee earnings, an increase of between 94,000 and 101,000 jobs and an increase in value added to the U.S. economy of between \$11.8 - \$12.4 billion."²³²

Hindering Service Quality Improvements. The current broken special access marketplace also undermines the Commission's efforts to encourage ongoing improvements in the quality of wireline and wireless services provided to consumers. As Level 3 noted, the lack of competitively provided special access connections "causes wired networks and wireless devices to perform poorly (or not as well as they could)," because a "single unchallenged provider of special access has little incentive to improve service quality, increase capacity or hold prices down." Moreover, excessive special access prices also directly affect the incentive and the ability of the incumbent LECs' carrier customers to improve the quality of their own offerings. For example, when special access costs are higher, the "financial disincentive[s]" also

²²⁹ NoChokePoints Reply Comments at 6.

Evan Engstrom, *Starting Up the Broadband Economy*, Recode (Dec. 3, 2015), http://recode.net/2015/12/03/starting-up-the-broadband-economy/.

²³¹ See Comments of the Office of Advocacy, U.S. Small Business Administration at 5, WC Docket No. 05-25 (filed May 24, 2012) ("Office of Advocacy Comments").

²³² Stephen E. Siwek, *Economic Benefits of Special Access Price Reductions*, at 3, attached to Letter from Maura Corbett, Spokesperson, NoChokePoints Coalition, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 05-25 (filed Mar. 15, 2011).

²³³ Level 3 Comments at 2.

are higher for wireless companies that seek to deploy "more cell towers to provide better service, as it would require purchasing even more of these high-cost access lines." Reforming the existing special access regulatory regime would restore wireless providers' incentive to add additional cell sites.

IX. THE COMMISSION MUST DEVELOP AND IMPLEMENT REMEDIES THAT ADDRESS THE UNREASONABLE RATES, TERMS, AND CONDITIONS FOR INCUMBENT LEC SPECIAL ACCESS SERVICES, BOTH NOW AND IN THE FUTURE

As explained above, the extensive data collected by the Commission in this proceeding show that there is insufficient actual or potential competition in the special access marketplace to discipline incumbent LEC behavior. As a result of their market power, incumbent LECs charge competitors excessive rates and impose anticompetitive terms and conditions to the detriment of consumers, competition, and innovation. In the face of these market conditions, the Commission must take immediate action to mitigate the ongoing harms created by the special access marketplace and implement a plan that makes certain that the rates, terms, and conditions are just and reasonable on a going-forward basis.

A. The Commission Can Implement Interim Measures to Inject Immediate Relief into the Special Access Marketplace

The Commission should implement immediate reforms to begin the process of repairing the broken current special access marketplace. As the NoChokePoints Coalition correctly noted more than *five years ago*, "[e]very month that reform is delayed represents hundreds of millions of dollars in overpayments and further injury to broadband deployment, innovation, and job

Michael Mooney, Special What? Why You Should Care about the FCC's Special Access Investigation, Beyond Bandwidth, Level 3 Communications Blog (Oct. 19, 2015), http://blog.level3.com/open-internet/special-what-why-you-should-care-about-the-fccs-special-access-investigation/.

growth."²³⁵ Similarly, the Small Business Administration noted more than three years ago that the FCC's "special access docket requires particularly urgent attention."²³⁶

1. Reverse Phase II Pricing Flexibility

First, as the Commission concluded in 2012, the predictive triggers that a previous Commission adopted to identify areas where incumbent LECs were subject to competition sufficient to warrant pricing flexibility were plainly wrong. The data now makes it clear that there is almost no competition anywhere in the special access marketplace regardless of what lens is used to view the market. Accordingly, to comply with sections 201 and 202 of the Act, the Commission must correct the unreasonable impact of the now-discredited triggers and return areas that are currently subject to Phase II pricing flexibility to the price cap regulatory regime. The Commission must also account for Ethernet services and take steps to bring such services under the price cap regime.

Subsequently, once it adopts a reasonable method of identifying areas with sufficient competition to produce just and reasonable rates, terms, and conditions, the Commission may find that there are geographic areas that are sufficiently competitive to warrant pricing flexibility. The Commission can account for these limited areas facing effective competition when it puts in place its long-term resolution at the conclusion of this proceeding.

NoChokePoints Comments at 2-3; *see also*, *e.g.*, NASUCA/Rate Counsel March 2013 Reply at 33 ("The longer the delay in addressing the anticompetitive terms and conditions for special access that now exist, the higher the excessive profits that ILECs earn, the more harm to the FCC's goal of competition, and the greater the drag on the nation's economy resulting from economically inefficient pricing signals."); Joint CLEC Comments at 13 ("each month that passes is another month in which American businesses must make do without the benefits of a truly competitive business broadband marketplace").

²³⁶ Office of Advocacy Comments at 5.

2. Find Anticompetitive Loyalty Commitments Unenforceable

The Commission has ample authority to take this action at this time and is not obligated to first undertake a section 205 rate prescription proceeding. As the Joint CLECs explained in a recent *ex parte*, the application of price caps does not constitute an actual or *de facto* rate prescription, because imposing price caps does not involve setting individual rates.²³⁷ To the contrary, price caps reflect only the Commission's "'tentative opinion' about the dividing line between reasonable and unreasonable rates for the limited purpose of exercising [its] suspension power" under section 204.²³⁸

As described above, the terms and conditions comprising incumbent LEC loyalty commitments are anticompetitive and allow incumbent LECs to preserve and expand their market dominance. The Commission therefore should take immediate action to address the anticompetitive impact of these terms and conditions.²³⁹

Specifically, the Commission should find that incumbent LEC loyalty commitments are unenforceable, a remedy it has implemented repeatedly in the past to address exclusive dealing arrangements for telecommunications.²⁴⁰ As the Commission recognized in these contexts,

Letter from Thomas Jones, Counsel, Birch Communications, Inc., BT Americas Inc., and Level 3 Communications, LLC, to Marlene H. Dortch, Secretary, FCC, at 4-5, WC Docket No. 05-25 (filed Aug. 28, 2015) ("Joint CLEC *Ex Parte*").

²³⁸ See Policy and Rules Concerning Rates for Dominant Carriers, Report and Order and Second Further Notice of Proposed Rulemaking, 4 FCC Rcd. 2873, ¶ 895 (1989); see also 47 U.S.C. § 204.

The Commission should not, however, suspend the pricing plans containing these provisions. This would only reward the incumbent LECs, as it would force current customers to purchase special access services at equally unjust and unreasonable rack rates, or to accept unjust and unreasonable restrictions on circuit portability.

²⁴⁰ See, e.g., Competitive Networks Order ¶¶ 1, 9; Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd. 20,235, ¶ 1 (2007); MDU

prohibiting the enforcement of unlawful commitments is preferable to "waiting until contracts expire and are replaced by contracts without exclusivity provisions," as "allowing expiration would delay development of competition." The Commission also noted that the parties in question had "been on notice for more than seven years that the Commission might prohibit both their entering, and enforcement of, such provisions"²⁴¹—here, the incumbent LECs have been on notice for *well over a decade*.

3. Offer Purchasers a "Fresh Look"

At the same time, the Commission should offer purchasers a "fresh look" to consider purchasing competitive alternatives in the small areas of the country where such an alternative exists. To effectuate this relief, the Commission should immediately suspend enforcement of incumbent LEC termination and portability penalties, pending the completion of comprehensive reform. While this action would provide relief in only limited circumstances, it represents a quick and easily implemented mechanism for allowing competition to take root in the few places where the broken market currently makes competition possible at all. Even in the vast majority of areas where purchasers would have no competitive options and therefore would be unable to switch from incumbent LEC provision of services, this action could create an incentive for more meaningful competition to develop in the short term as concentrated clusters of unlocked demand become available to a new entrant. Indeed, the Commission previously used a "fresh look" approach to eliminate barriers to special access competition posed by early termination

Exclusivity Order ¶ 13 ("We find that immediately prohibiting the enforcement of such provisions is more appropriate than phasing them out or waiting until contracts expire and are replaced by contracts without exclusivity provisions"); see also W. Union Tel. Co. v. FCC, 815 F.2d 1495, 1501 (D.C. Cir. 1987) (The FCC can "modify . . . provisions of private contracts when necessary to serve the public interest.").

²⁴¹ *MDU Exclusivity Order* ¶ 13.

liabilities, thereby allowing purchasers to take advantage of regulatory reforms that expanded interconnection.²⁴²

The Commission's IP transition goals further justify a "fresh look" remedy. As explained above, incumbent LECs are leveraging their continued dominance over TDM services to control Ethernet services, delaying progress of U.S. telecommunications and the applications they support, and threatening to repeat the unfortunate history of special access competition that has cost U.S. consumers so much. Incumbent LEC penalties are the core of these leveraging strategies, as they allow incumbents to condition migration to Ethernet on continued use of the incumbent LEC as the Ethernet provider. The Commission previously eliminated termination liabilities imposed by an incumbent to reduce the risk of precisely this kind of leveraging. 243

B. The Commission Must Act Quickly to Establish a Permanent Regulatory Regime

In addition to implementing the interim measures outlined above, the Commission also must take immediate steps to craft a regulatory regime that will govern special access prices, terms, and conditions in areas that are not subject to effective competition going forward. In exploring the suitable mechanisms for doing so, the Commission may find the econometric

See Expanded Interconnection with Local Telephone Company Facilities, Second Memorandum Opinion and Order on Reconsideration, 8 FCC Rcd. 7341, ¶¶ 3-41 (1993); Expanded Interconnection with Local Telephone Company Facilities, Memorandum Opinion and Order, 9 FCC Rcd. 5154, ¶¶ 197-208 (1994), remanded on other grounds, Pacific Bell v. FCC, 81 F.3d 1147 (D.C. Cir. 1996) (limiting termination liabilities in current contracts on the grounds that "certain long-term special access arrangements may prevent customers from obtaining the benefits of the new, more competitive access environment").

Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order on Reconsideration, 7 FCC Rcd. 2677, ¶¶ 23-28 (1992) (eliminating termination liabilities for certain current AT&T customers pursuant to section 205, on the grounds that "AT&T's termination liability clauses will be unreasonable in light of the risk of leveraging in 800 services").

analysis of the data it has gathered in this proceeding to be helpful in determining the appropriate adjustments to the current special access rates. Naturally, such analysis must be undertaken carefully and would need to address issues such as those described herein.

For example, econometric analysis may enable the agency to determine "benchmark" prices that can be used to adjust prices for special access services in the vast majority of locations where competition does not constrain the incumbent LECs. Of course, to establish reasonable benchmarks, the Commission would need to ensure that its analysis employs an appropriate measure of the "price" of the incumbent LEC's service. For instance, in assessing the relationship between prices and investment by incumbent LEC competitors, the Commission's analytic model should focus on the marginal price of special access services and not the much higher average price. The Commission's analysis also would need to take into account: (1) the extent to which the terms and conditions in the special access agreement governing the service affects the price; and (2) the regulatory regime that governs the incumbent LEC at the particular location where the service is offered.

The Commission also could perform an econometric analysis to revise, in part, the X-factor, which historically governed the growth rate of special access not subject to pricing flexibility. The initial X-factor was based on a total factor productivity ("TFP") growth rate that compared input costs to output prices. The Commission could use the collected data to measure the output and undertake other statistical techniques to update the X-factor. In addition, the Commission should explore other methodologies for updating an X-factor, including imputation of an X-factor based on changing prices of comparable services over time. The Commission's

²⁴⁴ See Sprint Comments at 12-16.

²⁴⁵ For a more fulsome discussion, see id.

data collection could provide one pricing point for such an analysis. Other available pricing data that could be used for an imputed X-factor include inputs to historic Commission pricing report (e.g., ARMIS data), posted tariff rates, competitor data, and cost models that could form a basis of price computation.

Finally, the Commission could explore the use of cost models as part of its development of a long-term special access regulatory regime. For example, the Commission could use existing cost models to compare pricing data in order to demonstrate that current market prices for special access services are unreasonable. Cost models also may allow the Commission to develop price caps for special access services that do not face effective competition based on costs as computed by these models, including a reasonable return on investment.

C. All Remedies the Commission Implements Should Extend to Ethernet Special Access Offerings

Irrespective of the regulatory regime that the Commission ultimately pursues, both the immediate and longer-term solutions that the Commission implements should extend to Ethernet special access products, including those currently subject to forbearance. As outlined above, the incumbent LECs' market power in the special access marketplace is derived largely from their control of last-mile facilities and other economies of scale and scope. As a result, their ability to exercise market power will persist regardless of whether the special access offerings are TDM-based or Ethernet. Moreover, because TDM-based and Ethernet special access services serve as effective substitutes, they should be subject to the same regulatory treatment. If, as the incumbent LECs argue, special access competition increases in markets where Ethernet services

²⁴⁶ See, e.g., Windstream Submission.

²⁴⁷ See supra at section V.B.

are rolled out, then providers in those markets can enjoy pricing flexibility in the same way that they do in any market with sufficient competition.

Notably, the Commission has the authority to reverse the existing grants of forbearance from dominant carrier regulation and impose rate regulation on Ethernet services at any time, whether by granting the pending petition to reverse forbearance²⁴⁸ or based on the record of this proceeding. There can be no doubt that the incumbent LECs have received ample notice that the Commission could reverse forbearance and adopt rate regulation of their non-TDM-based special access services. There also can be no doubt that the Commission can only fully address the consumer and competitive harms outlined herein by implementing a remedy that addresses the competitive shortfalls that face the special access marketplace at large.

X. CONCLUSION

The broadband services at issue in this proceeding form the core of the nation's information economy. From the lower-capacity dedicated lines that power our ATMs to the

²⁴⁸ See Petition to Reverse Forbearance.

See, e.g., Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Its Broadband Services, Memorandum Opinion and Order, 22 FCC Rcd. 18,705, ¶ 28 n.120 (2007) (noting that the Commission retains "the option of revisiting th[ese] forbearance ruling[s]"); Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Application of Computer Inquiry and Certain Title II Common-Carriage Requirements; Petition of the Frontier and Citizens ILECs for Forbearance Under Section 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Their Broadband Services, Memorandum Opinion and Order, 22 FCC Rcd. 19,478, ¶ 27 n.113 (2007); Qwest Petition for Forbearance Under 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Broadband Services, Memorandum Opinion and Order, 23 FCC Rcd. 12,260, ¶ 31 n.127 (2008); Ad Hoc Telecomms. Users Comm. v. FCC, 572 F.3d 903, 911 (D.C. Cir. 2009) (noting that the Commission's grants of forbearance were not "chiseled in marble" and could be reversed in the "ongoing Special Access Rulemaking proceeding").

²⁵⁰ See Joint CLEC Ex Parte; Reply Comments of BT Americas, Cbeyond, EarthLink, Integra, Level 3, and tw telecom at 15-26, WC Docket No. 05-25 (filed May 31, 2013).

higher-capacity connections that link office buildings and mobile phone towers to the Internet, special access services are essential to our country. Failure to address this marketplace will hinder the transition to IP technologies, including the movement to advanced 5G mobile networks. Recognizing this fact, the Commission undertook the most comprehensive data collection in the agency's history to: review our "special access rules to ensure that they reflect the state of competition today and promote competition, investment, and access to dedicated communications services businesses across the country rely on every day to deliver their products and services to American consumers." ²⁵¹

The data the FCC collected demonstrates that the state of competition is dire. Viewed from any vantage point, the conclusion is the same: there is inadequate competition to discipline incumbent LEC prices, terms, and conditions. As demonstrated in these comments:

- The incumbent LEC is the *only* provider of special access service at a huge majority of locations, *** **BEGIN HIGHLY CONFIDENTIAL** ***

 *** **END HIGHLY CONFIDENTIAL** ***, meaning that there is no actual or potential competition.
- There is only one other provider competing with the entrenched incumbent LEC at virtually all of the remaining locations, meaning that in an enormous ***

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 CONFIDENTIAL *** of locations are served by only one or two suppliers, meaning that there is inadequate competition to discipline incumbent behavior.
- And where is the competition that the incumbent LECs claim is so abundant? Almost nowhere. There are three suppliers in a very small *** BEGIN HIGHLY CONFIDENTIAL *** END HIGHLY CONFIDENTIAL *** of locations, and four or more suppliers in an even smaller *** BEGIN HIGHLY CONFIDENTIAL *** END HIGHLY CONFIDENTIAL *** of locations.

Approaching the Commission competition data from another angle, by using bandwidth-based shares to calculate HHI values, confirms these results. HHI exceeds the "Highly

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²⁵¹ 2012 R&O and FNPRM \P 1.

Concentrated" level in a jaw-dropping *** BEGIN HIGHLY CONFIDENTIAL ***

census blocks in which they provide service.

*** END HIGHLY CONFIDENTIAL *** of census blocks in which an incumbent LEC provides special access services. Even when disaggregating the FCC's data into bandwidth-based product market "buckets," the results are essentially the same. In each of the buckets analyzed herein, the incumbent LEC remains dominant in the overwhelming majority of

The Commission's data collection also shows that every responding incumbent LEC employs the anticompetitive terms and conditions that the FCC's inquiry sought to uncover. Consequently, it is now clear that these companies use unjust and unreasonable loyalty contracts, overage charges, shortfall payments, and excessive early termination fees to perpetuate their historical dominance of the marketplace, and to restrain any competition in the few locations where it attempts to gain a foothold.

The Commission's data collection has accomplished its job. It has allowed the FCC to see through ten years of incumbent LEC delay tactics, obfuscation, and excuses. The time to act is now, and the data collection provides the FCC with all it needs to move ahead. As a first step, the Commission should adopt immediate interim measures to stop the bleeding in the special access marketplace by: (1) returning services subject to Phase II pricing flexibility to the price cap regime and taking steps to bring Ethernet up price caps, (2) declaring anticompetitive loyalty commitments to be unjust and unreasonable, and (3) providing purchasers with a "fresh look" so they can avail themselves of competition in the few places where it exists. Next, the Commission must quickly implement long-term repairs to the special access regulatory system, through: (1) developing pricing benchmarks to adjust prices in areas where competition does not constrain prices, (2) revising the X-factor, or (3) using existing models that measure costs of service to set appropriate caps on prices.

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